

New synonyms in Actinidiaceae from China

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Abstract During the revision of the Actinidiaceae for the *Flora of China*, the treatments of a few taxa were changed and thus a number of synonyms are proposed. The necessary notes are provided.

Key words Actinidiaceae, Flora, China, synonym.

The taxonomy of *Actinidia* Lindl. and *Clematoclethra* Maxim. has been very controversial and confusing. In the first comprehensive revision of *Actinidia*, Dunn (1911) recognized 24 species of this genus. Later, Li's revision (1952) accounted 36 species, but he also alleged that the genus has 25 species (Li, 1976), without providing a detailed treatment. Liang (1984) adopted Li's system and recognized 51 species in China. More recently, it was believed that there were 62 species in China (Huang et al., 2000).

The highly variable and diverse vegetative and reproductive characters are mainly responsible for the taxonomic problems. Some of the putative species since Li's review often are only slightly different from previously described species, and some only refer to a few specimens, sometimes even to only a single specimen or fragmentary specimens. Additionally, Liang (1984) mistakenly interpreted some taxa. The taxonomy of the genus needs further revision based on extensive examination of specimens and careful observation in the herbarium and in the field.

We examined the specimens in the herbaria of the Institute of Botany of the Chinese Academy of Sciences (CAS) (PE), the Kunming Institute of Botany, CAS (KUN), the Guangxi Institute of Botany of the Guangxi Zhuang Autonomous Region and CAS (IBK), the South China Botanical Garden, CAS (IBSC), and the Wuhan Botanical Garden, CAS (HIB). Based on our studies, we finally recognized 52 species belonging to the genus *Actinidia* (Li et al., 2006).

In 1983, a number of new taxa of *Clematoclethra* were published (Chang, 1983), and the following year, 20 species of *Clematoclethra* were recognized (Liang, 1984). Surprisingly, later through Tang and Xiang's thorough statistical analysis, all of the taxa were united into one polymorphic species, which exhibits a great variation (Tang & Xiang, 1989). In the present paper, one new species and one new variety treated in *Flora Sichuanica* (Chang, 1988) are relegated into synonymy.

Necessary notes are provided. Since forms under varieties would not be accepted in the *Flora of China*, we simply treat all nomenclatural forms in synonymy under varietal names without further explanation.

1. *Actinidia arguta* (Sieb. & Zucc.) Planch. ex Miq. in Ann. Mus. Bot. Ludg.-Bat. 3: 15. 1867. — *Trochostigma arguta* Sieb. & Zucc. in Abh. Akad. Wiss. München. 3: 727. 1843. Type: Not designated.

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A. arguta var. *purpurea* (Rehd.) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 208, syn. nov.
 —*A. purpurea* Rehd. in Sarg. Pl. Wils. 2: 378. 1915. Type: China. Sichuan (四川): Kangding (康定), *E. H. Wilson 1314* (holotype, A!).

软枣猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. **Anhui** (安徽): Huang Shan (黄山), T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 2777; Without precise locality, R. C. Ching (秦仁昌) 43. **Beijing** (北京): Changping (昌平), Herbarium number 1254; Mingling (明陵), K. M. Liu (刘继孟) 618; Miyun (密云), Y. Liu (刘瑛) 15356; Nankou (南口), H. F. Chow (周汉藩) 41991. **Chongqing** (重庆): Chengkou (城口), T. L. Dai (戴天伦) 105460; Wuxi (巫溪), Y. D. Chen (陈耀东) 2018. **Fujian** (福建): Wuyishan Shi (武夷山市), C. P. Tsien (简焯坡) 400869, 400822; Jianning (建宁), Z. Y. Li (李振宇) 0754. **Guangxi** (广西): Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 10963; Rongshui (融水), Q. H. Lü (吕清华) 2786. **Guizhou** (贵州): Fanjing Shan (梵净山), P. C. Tsoong (钟补勤) 947, 1820; Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 3685; Nayong (纳雍), Bijie Exped. (毕节队) 785; Weining (威宁), Bijie Exped. (毕节队) 88. **Hebei** (河北): Chengde (承德), Anonymous 0202; Chicheng (赤城), Anonymous 7692; Dongling (东陵), H. T. Tsai (蔡希陶) 50367, 50005, C. F. Li (李建藩) 43, 10043, 11644, 11167, D. F. Jin (金德福) 962, 807, T. Tang (唐进) 2149, K. M. Liu (刘继孟) 310; Fuping (阜平), K. M. Liu (刘继孟) 3538; Laishui (涞水), K. M. Liu (刘继孟) 2501; Tianchao Shan (天朝山), C. W. Wang (王启无) 60831; Wu'an (武安), K. C. Kuan (关克俭) 5886; Wuling Shan (雾灵山), Dongling Exped. (东陵调查队) 237, W. T. Wang (王文采) 2570; Xiaowutai Shan (小五台山), Anonymous 5162, C. W. Wang (王启无) 61824, Y. Liu (刘瑛) 11366; Xinglong (兴隆), Herbarium Number 2070, 2220; Yi Xian (易县), Anonymous 3298; Yuanshi (元氏), Anonymous 156; Zhuolu (涿鹿), C. G. Yang (杨朝广) 588. **Heilongjiang** (黑龙江): Shangzhi (尚志), T. N. Liou (刘慎谔) 7251; Without precise locality, M. Noda (野田光藏) 772. **Henan** (河南): Lingbao (灵宝), Bot. Exped. (普查标本) 18803; Lushi (卢氏), K. M. Liu (刘继孟) 4952, 4410, Loess Plat. Exped. (黄土高原采集队) 2962, Henan Exped. (河南队) 34206; Shangcheng (商城), Anonymous 263; Xixia (西峡), Henan Exped. (河南队) 602, 1529, 957, 1521; Without precise locality, Anonymous 65. **Hunan** (湖南): Hengshan (衡山), C. J. Qi (祁承经) 36. **Jilin** (吉林): Antu (安图), Yanbian No. 2. Exped. (延边2组) 28, P. Y. Fu (傅沛云) 1405, C. S. Wang (王崇书) 761, Anonymous 1162; Changbaishan (长白山), Yanbian No. 1 Exped. (延边1组) 530, Temperate Forest Exped. (温带森林组) 452, Ecol. Exped. (生态组) 1162; Fusong (抚松), Tonghua Exped. (通化组) 188, S. G. Wang (王遂刚) 764; Helong (和龙), Yanbian No. 2. Exped. (延边2组) 997, 998; Huadian (桦甸), Y. C. Ma (马毓泉); Jiaohe (蛟河), Y. L. Zhang (张玉良) 949; Linjiang (临江), S. X. Li (李书馨) 1062; Without precise locality, Ecol. Exped. (生态组) 452. **Jiangxi** (江西): Qianshan (铅山), Y. D. Chen (陈耀东) 1114. **Liaoning** (辽宁): Anshan (鞍山), Q. T. Li (李清涛) 2614; Beining (北宁), T. N. Liou (刘慎谔) 2938; Benxi (本溪), S. X. Li (李书馨) 594, Y. Yabe s.n.; Huanren (桓仁), C. S. Wang (王崇书) 4003, 3939; Jiushan (九山), W. Wang (王薇) 169; Qingyuan (清原), C. S. Wang (王崇书) 1211; Qianshan (千山), S. G. Wang (王遂刚) 612, 441, P. Y. Fu (傅沛云) 2614, Z. Wang (王战) 1279; Suizhong (绥中), S. X. Li (李书馨) 489; Xiuyan (岫岩), W. Wang (王薇) 1340. **Shaanxi** (陕西): Baoji (宝鸡), C. W. Wang & P. C. Tsoong (王启无, 钟补勤) 112; Foping (佛坪), P. C. Kuo (郭本兆) 1470; Hua Shan (华山), T. N. Liou (刘慎谔) 10739; Shanyang (山阳), Z. Y. Zhang (张志英) 16123; Weinan (渭南), T. P. Wang (王作宾) 15760; Without precise locality, T. P. Wang (王作宾) 9246. **Shandong** (山东): Kunyu Shan (昆崙山), T. Y. Cheo (周太炎) 748, Shandong Pl. Exped. (山东野生植物普查队) 583; Lao Shan (崂山), T. Y. Cheo (周太炎) 1163, 1105, 1220, Sino-Germany Exped. (中德队) 453, C. Y. Chiao (焦启源) 2856; Tai'an (泰安), Qufu Norm. Univ. Biol. Depart. (曲阜师范大学生物系) 96106113, 96105159. **Shanxi** (山西): Huozhou (霍州), K. C. Kuan (关克俭) 586, Huanghe Exped. (黄河队) 845; Jiexiu (介休), Harry Smith 5644, K. M. Liu (刘继孟) 1312; Qinsui (沁水), T. W. Liu & C. G. Li (刘天慰, 李才贵) 467; Yicheng (翼城), X. Y. Liu (刘心源) 20353; Yuanqu (垣曲), T. W. Liu (刘天慰) 544, 527, 551; Yuncheng (运城), S. Y. Bao (包士英) 880. **Sichuan** (四川): Baoxing (宝兴), S. S. Chang (张秀实) 5229, 4883, 5184, 5026, T. H. Tu (杜大华) 4359; Butuo (布拖), Veg. Exped. (植被组) 14161; Emei Shan (峨眉山), J. H. Xiong (熊济华) 32511; Kangding (康定), Z. P. Huang (黄治平) 1884; Leibo (雷波), Sichuan Econ. Pl. Exped. (川经队) 0361; Mianning (冕宁), Sichuan Econ. Pl. Exped. (川经队) 1994; Shimian (石棉), C. J. Xie (谢朝俊) 40999, 42442, 40974; Tianquan (天全), X. L. Jiang (蒋兴麟)

37953, 34965, 37760, 34920, Sichuan Econ. Pl. Exped. (川经队) 588, W. K. Hu (胡文光) 34709, 11748; Without precise locality, R. H. Shan (单人骅) 5779, F. T. Wang (汪发纘) 22454a. **Taiwan** (台湾): Taizhong (台中), C. I. Peng (彭镜毅) 637. **Yunnan** (云南): Binchuan (宾川), R. C. Ching (秦仁昌) 24945; Daguan (大关), NE Yunnan Exped. (滇东北队) 278; Dêqên (德钦), Anonymous 23643; Gongshan (贡山), T. T. Yu (俞德浚) 22011, K. M. Feng (冯国楫) 7245, Nanshuibeidiao Exped. (南水北调队) 8733; Lanping (兰坪), H. T. Tsai (蔡希陶) 54000; Lijiang (丽江), K. M. Feng (冯国楫) 21069; Pingbian (屏边), H. T. Tsai (蔡希陶) 62468; Weixi (维西), C. W. Wang (王启无) 70432, 63704, 68660, 63608, 64046, Nanshuibeidiao Exped. (南水北调队) 8346, K. M. Feng (冯国楫) 21107, 3684; Wenshan (文山), Y. M. Shui (税玉民) 2732; Zhenxiong (镇雄), P. H. Yu (禹平华) 1036, NE Yunnan Exped. (滇东北队) 1155; Without precise locality, H. T. Tsai (蔡希陶) 57168, 57325, 57569. **Zhejiang** (浙江): Lin'an (临安), M. B. Deng (邓懋彬) 4727, X. Y. Ho (贺贤育) 23997; Longquan (龙泉), S. Y. Chang (张绍尧) 3290; Suichang (遂昌), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 25701.

Extending from northeastern to southwestern China, *Actinidia arguta* var. *arguta* is a variable taxon, having mostly broadly ovate but sometimes oblong to ovate leaves, even in the same specimen. *Actinidia purpurea* was reduced to a varietal status by Liang (1984) based on fruit color and leaf serrations. However, the purple color of the fruit is not correlated with serratures and barbs of the leaves as Liang asserted (Liang, 1984). In addition, specimens from Yunnan with narrower leaves sometimes have green fruit instead of purple fruit, and field record of one specimen from Jilin with broadly ovate leaves showed that it has purple fruit, indicating that color of the fruit is not stable.

1a. *Actinidia arguta* var. *giraldii* (Diels) Voroshilov in Byull. Glavn. Bot. Sada (Moscow) 84: 33. 1972. — *A. giraldii* Diels in Bot. Jahrb. 36, Beibl. 82: 75. 1905. Type: China. Southern Shaanxi (陕西南部): Without precise locality, *G. Giraldi* 4065 (isotype, A!).

A. arguta var. *nervosa* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 309. 1984, syn. nov. Type: China. Zhejiang (浙江): Tiantai Shan (天台山), alt. 900 m, 1959-07-07, *Zhejiang Pl. Resour. Exped.* 28283 (浙江植物资源普查队) (holotype, PE!).

A. melanandra Franch. var. *kwangsiensis* (H. L. Li) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 210. 1984, syn. nov. — *A. kwangsiensis* H. L. Li in Journ. Arn. Arb. 33: 26. 1952. Type: China. Guangxi (广西): Luocheng (罗城), alt. 1000 m, 1926-06-20, R. C. Ching (秦仁昌) 6185 (holotype, NY; isotype, PE!).

陕西猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), T. L. Dai (戴天伦) 101037, 104052; Fengjie (奉节), T. Y. Chang (张泽荣) 25270. **Guangxi** (广西): Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 703. **Henan** (河南): Lushi (卢氏), K. M. Liu (刘继孟) 4930, Anonymous 34155; Song Xian (嵩县), Bot. Exped. (植物资源普查队) L0310, Henan Exped. (河南队) 2618, Henan Forestry Depart. (河南林业厅) 842; Without precise locality, K. C. Kuan (关克俭) 1675. **Hubei** (湖北): Enshi (恩施), Anonymous 24368; Hefeng (鹤峰), H. J. Li (李洪钧) 5553, F. S. Peng (彭辅松) 538; Jianshi (建始), T. L. Dai (戴天伦) 1414; Xingshan (兴山), H. J. Li (李洪钧) 40; Xuan'en (宣恩), H. J. Li (李洪钧) 4139, 4109; Zhuxi (竹溪), K. M. Liu (刘继孟) 8600. **Hunan** (湖南): Sangzhi (桑植), B. G. Li (李丙贵) 750154; Xinning (新宁), Y. B. Luo (罗毅波) 2427, Ziyunshan Exped. (紫云山队) 1538. **Jiangxi** (江西): Lu Shan (庐山), J. Xiong (熊杰) 6490. **Shaanxi** (陕西): Hu Xian (户县), P. C. Kuo (郭本兆) 351, 603, 505, 779; Taibai Shan (太白山), T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 3749. **Sichuan** (四川): Meigu (美姑), Veg. Exped. (植被组) 13529; Without precise locality, Sino-Russia Exped. (中苏队) 2103. **Zhejiang** (浙江): Chun'an (淳安), Anonymous 30256; Lin'an (临安), Anonymous 29188, Hangzhou Bot. Gard. (杭州植物园) 28576; Tianmu Shan (天目山), Tianmushan Pl. Records (天目山记载册) D206, W. C. Cheng (郑万钧) 3681, X. Y. Ho (贺贤育) 26395, 22272, 22274, Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 29396, 29525, S. Y. Chang (章绍尧) 24547, M. B. Deng (邓懋彬) 4225; Tiantai Shan (天台山), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 28672; Without precise locality, H. H. Hu (胡先骕) 1583.

Field record of the type of *Actinidia kwangsiensis* showed that the leaves of this species are not glaucous abaxially; therefore, it should not be attributed to a variety of *A. melanandra*. *Actinidia melanandra* differs from *A. arguta* by its leaves being glaucous abaxially and, overall, narrower and smaller, ranging from lanceolate to rounded. Furthermore, the leaves of *A. kwangsiensis* are tomentose abaxially, which may be dense or sparse to only tomentose along the midvein, matching the characteristics of *Actinidia arguta* var. *giraldii*.

As regards *A. arguta* var. *nervosa*, its leaves may be densely to sparsely tomentose abaxially, to only tomentose along the midvein abaxially. There is no clear discontinuity between var. *nervosa* and var. *giraldii*. Thus, *Actinidia arguta* var. *nervosa* is united with *Actinidia arguta* var. *giraldii*.

2. *Actinidia melanandra* Franch. in Journ. Bot. 8: 278. 1894. Type: China. Chongqing (重庆): Chengkou (城口), *R. P. Farges s.n.* (isotype, K!).

A. globosa C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 309. 1984, syn. nov. Type: China. Guangxi (广西): Ziyuan (资源), 1937-10-05, *J. X. Zhong* (钟济新) 83575 (holotype, IBSC!; isotype, IBK!).

A. henanensis C. F. Liang in Guihaia 2 (1): 1. 1982, syn. nov. Type: China. Henan (河南): Lushi (卢氏), Xionger Shan (熊耳山), 1981-06, *J. X. An & S. G. Zheng* (安景新, 郑书贵) 8017 (holotype, IBK!).

A. hypoglaucula P'ei & Law in Bot. Bull. Acad. Sin. 2: 27. 1948, syn. nov. Type: China. Sichuan (四川): Ebian (峨边), *T. H. Chao* (赵子孝) 304 (holotype, NAS!).

A. melanandra var. *cretacea* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 310. 1984, syn. nov. Type: China. Hubei (湖北): Xingshan (兴山), Sanchakou (三岔口), 1957-07-15, *H. J. Li* (李洪钧) 1088 (holotype, IBSC; isotype, PE!).

A. melanandra var. *subconcolor* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 310, 1984, syn. nov. Type: China. Zhejiang (浙江): Tiantai Shan (天台山), alt. 500 m, 1958-06-19, *Hangzhou Botanical Garden* (杭州植物园) 0281 (holotype, IBK!).

黑蕊猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), *T. L. Dai* (戴天伦) 101996; Nanchuan (南川), *J. H. Xiong* (熊济华) 93193, 91601; Wu Shan (巫山), *G. H. Yang* (杨光辉) 58972; Wuxi (巫溪), *G. H. Yang* (杨光辉) 59364. **Fujian** (福建): Jianning (建宁), *Z. Y. Li* (李振宇) 10637; Wuyishan Shi (武夷山市), *C. P. Tsien* (简焯坡) 401016. **Gansu** (甘肃): Tianshui (天水), *K. M. Liu* (刘继孟) 10239. **Guizhou** (贵州): Dafang (大方), *Bijie Exped.* (毕节队) 854; Fanjing Shan (梵净山), *C. P. Tsien* (简焯坡) 30944; Leishan (雷山), *C. P. Tsien* (简焯坡) 50637, 50722. **Hubei** (湖北): Enshi (恩施), *G. X. Fu* (傅国勋) 1363; Hefeng (鹤峰), *H. J. Li* (李洪钧) 5611; Xuan'en (宣恩), *H. J. Li* (李洪钧) 3485. **Hunan** (湖南): Xinning (新宁), Forestry Institute of Xinning (新宁县林科所) 175, *Z. C. Luo* (罗仲春) 830. **Jiangxi** (江西): Jing'an (靖安), *C. M. Tan* (谭策铭) 971256; Wugong Shan (武功山), *Jiangxi Exped.* (江西队) 972; Yifeng (宜丰), *S. S. Lai* (赖书绅) 493. **Shaanxi** (陕西): Taibai Shan (太白山), *T. N. Liou* (刘慎谔) 3413. **Sichuan** (四川): Dujiangyan (都江堰), *W. P. Fang* (方文培) 2364; Without precise locality, *W. C. Cheng & C. T. Hwa* (郑万钧, 华敬灿) 1109. **Zhejiang** (浙江): Lin'an (临安), Anonymous 30398, *X. Y. Ho* (贺贤育) 23379, 26177; Ji'an (安吉), *X. Y. Ho* (贺贤育) 24110; Kaihua (开化), *Zhejiang Pl. Resour. Exped.* (浙江植物资源普查队) 26228; Suichang (遂昌), *Zhejiang Pl. Resour. Exped.* (浙江植物资源普查队) 26631, 25836; Tianmu Shan (天目山), *Q. X. Zheng* (郑求星) S815-127, *Zhejiang Pl. Resour. Exped.* (浙江植物资源普查队) 29335, *Tianmushan Pl. Records* (天目山记载册) 453, *X. Y. Ho* (贺贤育) 22329, 21869; Without precise locality, *H. H. Hu* (胡先骕) 1659.

The leaves of *Actinidia melanandra* vary greatly in morphology from lanceolate to lanceolate-ovate to ovate to rounded. Normally, it can be readily distinguished from *A. arguta* by its glaucous leaves abaxially, a character which is not necessarily constant in *Actinidia*. We

suspect that it is conspecific with *A. arguta*, which needs to be confirmed through extensive field observations of this trait in the natural populations. The fruits are globose to cylindric-oblong, with no correlation to leaf morphology.

Actinidia globosa is here reduced as a synonym of *A. melanandra* based on similarity of leaf and fruit characteristics. *Actinidia melanandra* var. *cretacea* and var. *subconcolor* were established based on the density of the powdery substance on the abaxial surface of the leaves and on the leaf morphology and the serrature on the leaf margins, both of which are highly variable. *Actinidia henanensis* is reported to be distinguished by its long stout fruit (4.5×3.7 cm), but otherwise other characteristics are similar to *A. melanandra*. Since individuals of *A. melanandra* that have abaxially glaucous leaves bear globose to oblong to cylindric fruit, in this context *A. henanensis*, reduced here as a synonym, can be viewed to represent an extreme form of the species.

3. *Actinidia kolomikta* (Maxim. & Rupr.) Maxim. in Mém. Acad. Sci. St. Pétersb. Sav. Etrang 9: 63. 1859 (Prim. Fl. Amur.).—*Prunus? kolomikta* Maxim. & Rupr. in Bull. Phys. Math. Acad. Sci. St. Petersb. 15: 129. 1856. Type: Russia. Amur River, *C. J. Maximowicz s.n.* (isotype, NY!).

A. leptophylla C. Y. Wu in Fl. Yunnan. 1: 63. 1977, syn. nov. Type: China. Yunnan (云南): Yongshan (永善), alt. 2300 m, 1932-06-21, *H. T. Tsai* (蔡希陶) 51071 (holotype, KUN!; isotype, PE!).

狗枣猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Fengjie (奉节), M. Y. Fang (方明渊) 24261, H. Y. Su (粟和毅) 108010, S. Y. Chang (张申荣) 25215; Nanchuan (南川), G. F. Li (李国凤) 61535, 61893, 63036, 63064, 62738, 61765, 61792, J. H. Xiong & Z. L. Zhou (熊济华, 周子林) 91361, 91081, 92572, Jingfoshan Exped. (金佛山考察队) 745, 742, Science Instit. W. China (中国西部科学院) 3179, 21757, C. H. Qu (曲仲湘) 1318. **Gansu** (甘肃): Kang Xian (康县), Q. X. Li & X. C. Zhao (李全喜, 赵兴存) 1845. **Heilongjiang** (黑龙江): Dailing (带岭), T. N. Liou (刘慎谔) 6984; Harbin (哈尔滨), Z. Wang (王战) 2288; Shangzhi (尚志), G. Z. Wang (王光正) 297, T. N. Liou (刘慎谔) 7352; Xiao Hinggan Ling (小兴安岭), T. N. Liou (刘慎谔) 7120; Yichun (伊春), T. N. Liou (刘慎谔) 3345, W. Wang (王薇) 961; Without precise locality, P. H. Dorsett & J. H. Dorsett 3068, 5985, K. S. Hao (郝景盛) 16069, Y. L. Zhang (张玉良) 392. **Hubei** (湖北): Enshi (恩施), G. X. Fu & Z. S. Zhang (傅国勋, 张志松) 1408. **Jilin** (吉林): Antu (安图), Tonghua Exped. (通化组) 202; Changbai Shan (长白山), Anonymous 593, W. Wang (王薇) 2148, Yanbian No. 1 Exped. (延边一组) 298, 308, J. J. Qian (钱家驹) 411, 843, Temperate Forest Exp. (温带森林组) 081, Tonghua Exped. (通化组) 56, T. N. Liou & Z. Y. Wu (刘慎谔, 武占元) 1817, 1748; Dunhua (敦化), Y. L. Zhang (张玉良) 1070; Fusong (抚松), D. Y. Hong (洪德元) 33834, 33835, Y. L. Zhang et al. (张玉良等) 617, 618, 109, T. N. Liou & Z. Y. Wu (刘慎谔, 武占元) 1925, 1267; Helong (和龙), Tonghua Exped. (通化组) 1016, Yanbian No. 2 Exped. (延边二组) 938; Huichun (珲春), P. Y. Fu (傅沛云) 777; Linjiang (临江), T. N. Liou & Z. Y. Wu (刘慎谔, 武占元) 1008, 903, 806; Manjiang (漫江), Temperate Forest Exped. (温带森林组) 183, Ecol. Exped. (生态组) 81. **Liaoning** (辽宁): Benxi (本溪), M. Noda (野田光藏) 655; Huanren (桓仁), S. C. Cui (崔顺昌) 147. **Shaanxi** (陕西): Hanzhong (汉中), J. W. Wang & Z. C. Shi (汪劲武, 施志诚) 238. **Sichuan** (四川): Baoxing (宝兴), S. S. Chang & Y. X. Ren (张秀实, 任有铎) 5352, 5256, 5163, T. H. Tu (杜大华) 4250, 694, T. P. Soong (宋滋圃) 38251, 38791, 38964, T. T. Yu (俞德浚) 1798, 2073, 1958; Dujiangyan (都江堰), F. T. Wang (汪发绩) 20591, W. P. Fang (方文培) 2239; Ebian (峨边), Z. T. Guan (管中天) 6548, 8184, T. T. Yu (俞德浚) 856; Emei Shan (峨眉山), Anonymous 1609, W. P. Fang (方文培) 3063, 2865, 20676, 14785, 20692, G. H. Yang (杨光辉) 54725, 5632, 55412, 56391, 55016, 55096, 57403, 56715, 57231, 54721, 55417, 55502, J. H. Xiong et al. (熊济华等) 31361, 31343, 30747, S. S. Chang & X. L. Jiang (张秀实, 蒋兴廖) 31567, T. H. Tu (杜大华) 220, 235, 526, W. T. Wang (王文采) 839, H. G. Xu (徐洪贵) 5691, 884, 2549, 5397, Sino-Russia Exped. (中苏队) 1965, 2377, 2413, 2254, T. N. Liou & Z. Wang (刘慎谔, 王战) 1184, F. T. Wang (汪发绩) 23485b, L. W. Wang (王立为) 814, 841, C. Y. Wu et al. (吴征镒等) 92, Sichuan Exped. (四川队) 1448,

64080, 1984, S. X. Wang (王蜀秀) 490, S. N. Xu (许绍楠) 169; Ganluo (甘洛), Anonymous 4343; Hanyuan (汉源), T. P. Wang (王作宾) 8919, Q. S. Zhao (赵清盛) 1089, Z. S. Liu (刘振书) 455; Hongya (洪雅), T. H. Tu (杜大华) 320; Jinyang (金阳), Sichuan Econ. Pl. Exped. (川经队) 3083; Kangding (康定), Z. P. Huang et al. (黄志平等) 1711; Leibo (雷波), Anonymous 0034, T. T. Yu (俞德浚) 3546, Sichuan Econ. Pl. Exped. (川经队) 316, 693, 1035, 258, Z. T. Guan (管中天) 8578, 7713, 8489, Nanshuibeidiao Exped. (南水北调队) 4495; Luding (泸定), Anonymous 6945, 6950, F. T. Wang (王作宾) 9803; Mabian (马边), T. H. Tu (杜大华) 5498, T. T. Yu (俞德浚) 5840, F. T. Wang (王作宾) 23093; Meigu (美姑), Z. T. Guan (管中天) 7472, 9073, Sichuan Econ. Pl. Exped. (川经队) 1239, 1785, 1938; Mianning (冕宁), Sichuan Econ. Pl. Exped. (川经队) 2053, 1796; Mao Xian (茂县), Sichuan Econ. Pl. Exped. (川经队) 2135, Sino-Russia (中苏队) 7108, Nanshuibeidiao Exped. (南水北调队) 7108; Pingshan (屏山), T. T. Yu (俞德浚) 3546, 3078; Pingwu (平武), X. L. Jiang (蒋兴廖) 10401, 10439; Puge (普格), Anonymous 4558, Sichuan Econ. Pl. Exped. (川经队) 5496; Shimian (石棉), W. L. Chen et al. (陈伟烈等) 6224, C. J. Xie (谢朝俊) 41199, 42111, 42657, 41251, 41932; Tianquan (天全), W. K. Hu & Z. He (胡文光, 何铸) 10020, 10068, 10204, 10006, Sichuan Econ. Pl. Exped. (川经队) 787, 825, Nanshuibeidiao Exped. (南水北调队) 1808, 9946, X. L. Jiang & J. H. Xiong (蒋兴廖, 熊济华) 34604, 34259, 35311, 34342, W. K. Hu (胡文光) 34675, Sichuan Exped. (四川队) 1984, 2116, X. L. Jiang (蒋兴廖) 35224, 35137; Wenchuan (汶川), Anonymous 8381, 8430, 8149, F. T. Wang (汪发纘) 21097, Sichuan Econ. Pl. Exped. (川经队) 0392; Xingjing (荣经), Q. S. Zhao (赵清盛) 1532, 339; Xingwen (兴文), Sichuan Econ. Pl. Exped. (川经队) 392, 473; Yuexi (越西), T. T. Yu (俞德浚) 927, 943, Sichuan Econ. Pl. Exped. (川经队) 3704, Sino-Russia Exped. (中苏队) 7689. **Yunnan** (云南): Duguan (大关), B. S. Sun (孙必兴) 823; Suijiang (绥江), B. S. Sun (孙必兴) 273, 201; Yongshan (永善), H. T. Tsai (蔡希陶) 50998, 51000, B. S. Sun (孙必兴) 0449.

The holotype and isotype of *Actinidia leptophylla* C. Y. Wu, *H. T. Tsai 51071*, have glabrous ovary, five sepals, five petals, and adaxially strigose leaves, pointing its identity as *A. kolomikta* (Maxim. & Rupr.) Maxim.

4. *Actinidia tetramera* Maxim. in Trudy Imp. S.-Peterburgsk. Bot. Sada 11: 35. 1890. Type: China. Chongqing (重庆): Chengkou (城口), *R. P. Farges 530* (isotype, NY!).

A. tetramera var. *badongensis* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 311, 1984, syn. nov. Type: China. Hubei (湖北): Badong (巴东), forest understory, alt. 2400 m, 1958-09-24, *F. H. Chen* (陈封怀) 5083 (holotype, HIB!).

四萼猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), T. L. Dai (戴天伦) 100810; **Fengjie** (奉节), H. F. Zhou & H. Y. Su (周洪富, 粟和毅) 107673; Kai Xian (开县), T. L. Dai (戴天伦) 101759, 101796; Wuxi (巫溪), Y. D. Chen (陈耀东) 2557, G. H. Yang (杨光辉) 58839, 59286, 58932. **Gansu** (甘肃): Kang Xian (康县), Z. Y. Zhang (张志英) 17142; Pingliang (平凉), T. P. Wang (王作宾) 13364; Tianshui (天水), Huanghe Exped. (黄河队) 3818, K. M. Liu (刘继孟) 10180; Zhang Xian (漳县), Huanghe Exped. (黄河队) 4821; Zhouqu (舟曲), T. P. Wang (王作宾) 15166, 14476, Y. Q. He (何叶琪) 652. **Henan** (河南): Lushi (卢氏), Anonymous 34494, K. M. Liu (刘继孟) 5136; Song Xian (嵩县), Anonymous 3490. **Hubei** (湖北): Badong (巴东), G. X. Fu & Z. S. Zhang (傅国勋, 张志松) 00955; Shennongjia (神农架), No. 236-6 Exped. (236-6队) 2534, Hubei Bot. Exped. (鄂植考察队) 24898, Shennongjia Exped. (神农架队) 22764. **Shaanxi** (陕西): Foping (佛坪), K. T. Fu (傅坤俊) 4846, P. C. Kuo (郭本兆) 1600, H. W. Kung (孔宪武) 3664; Hua Shan (华山), T. N. Liou (刘慎谔) 10864, 10818, K. S. Hao (郝景盛) 4223, T. P. Wang (王作宾) 4115, 19623, W. Y. Hsia (夏纬瑛) 4223; Hu Xian (户县), P. C. Kuo (郭本兆) 323, 706; Hua Xian (华县), T. P. Wang (王作宾) 15897; Ningshan (宁陕), K. T. Fu (傅坤俊) 17643; Shanyang (山阳), J. X. Yang (杨金祥) 3199; Taibai Shan (太白山), Anonymous 23, Z. Wang (王战) 659, T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 2069, 375, 1944, T. P. Wang (王作宾) 1913, J. X. Yang (杨金祥) 826, 1213, Qinling Exped. (秦岭调查队) 236, Taibaishan Exped. (太白山队) 58064, 58065, F. T. Wang (汪发纘) 007. **Sichuan** (四川): Danba (丹巴), Nanshuibeidiao Exped. (南水北调队) 2202; Heishui (黑水), Nanshuibeidiao Exped. (南水北调队) 7189, 7188, X. Li (李馨) 73264, 73331, 73994, 73744, 73877, 73472, 73605; Jinchuan (金川), Anonymous 9935, The Eighth Forest Management Exped. (第八森林经理大队) 4119, X. Li (李馨) 77642, 78257, 77313, 78644, 77451, 77261,

78670, 76765, 78482; Jiuzhaigou (九寨沟), W. H. Li et al. (李文华等) H82-482, Q. X. Li & X. C. Zhao (李全喜, 赵兴存) 2848; Kangding (康定), Anonymous 05210, W. K. Hu & Z. He (胡文光, 何铸) 11346, 11248, Y. T. Wu & Q. S. Zhao (伍煜庭, 赵清盛) 111012; Li Xian (理县), Z. He & Z. L. Zhou (何铸, 周子林) 12524, Q. S. Zhao (赵清盛) 1438, X. Li (李馨) 46845; Mao Xian (茂县), Nanshuibeidiao Exped. (南水北调队) 694; Pi Xian (郫县), Anonymous 6088; Pingwu (平武), X. L. Jiang (蒋兴廖) 10743; Xiaojin (小金), S. S. Chang & Y. X. Ren (张秀实, 任有铎) 6736, 5864, 6818.

Actinidia tetramera var. *badongensis* differs from var. *tetramera* in that its leaves are strigose adaxially and they lack barbate pubescence abaxially. Since these two characters, i.e. absence of barbs and presence of strigose hairs, are not correlated with each other, *Actinidia tetramera* var. *badongensis* is treated as a synonym.

5. *Actinidia valvata* Dunn in Journ. Linn. Soc. Bot. 39: 404. 1911. Type: China. Jiangxi (江西): Lu Shan (庐山), *T. L. Bullock* 121 (isotype, K!).

A. valvata var. *boehmeriaefolia* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 311. 1984, syn. nov. Type: China. Jiangxi (江西): Lu Shan (庐山), Yadongping (亚洞坪), alt. 1070 m, 1963-09-08, M. X. Nie & S. L. Chen (聂敏祥, 陈世隆) 7927 (holotype, PE!).

A. valvata var. *longipedicellata* L. L. Yu in Guihaia 8 (2): 132. 1988, syn. nov. Type: China. Zhejiang (浙江): Ningbo (宁波), L. L. Yu (於玲珑) 8163 (holotype, IBK!).

对萼猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Anhui (安徽): Huang Shan (黄山), M. Chen (陈谋) 1345, T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 2999, X. Zhou & C. Pan (周许, 潘程) 106; She Xian (歙县), Anonymous 1443; Xiuning (休宁), Anonymous 2200; Yuexi (岳西), X. L. Liu (刘小龙) 542. **Fujian** (福建): Jianning (建宁), Z. Y. Li (李振宇) 10960 (PE, IBK). **Guangdong** (广东): Ruyuan (乳源), S. P. Ko (高锡朋) 53081 (IBK). **Hubei** (湖北): Wuhan (武汉), J. Q. Li (李建强) 1090 (HIB). **Hunan** (湖南): Chengbu (城步), T. R. Cao (曹铁如) 830159 (IBK), Q. Z. Lin (林亲众) 11038 (IBK); Heng Shan (衡山), H. T. Chang (张宏达) 3188 (IBK); Without precise locality, Anonymous 203842. **Jiangxi** (江西): Fuliang (浮梁), Q. H. Li & C. Chen (李启和, 陈策) 640; Jinggang Shan (井冈山), Anonymous (70) 195; Lichuan (黎川), M. X. Nie (聂敏祥) 2975 (PE, IBK); Lu Shan (庐山), S. J. Shen (沈绍金) 336; Suichuan (遂川), No. 236 Exped. (236任务组) 779; Wuning (武宁), S. S. Lai (赖书绅) 2785; Quannan (全南), J. Xiong (熊杰) 742; Wuyuan (婺源), Q. H. Li & C. Chen (李启和, 陈策) 892, 341; Xingguo (兴国), Inst. Bot. Exped. (植物所队) 46, 481; Xiushui (修水), S. S. Lai (赖书绅) 2946; Yongxiu (永修), S. S. Lai (赖书绅) 2269. **Zhejiang** (浙江): Chun'an (淳安), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 27768; Hangzhou (杭州), Anonymous 736, T. Tang & N. Y. Hsia (唐进, 夏纬英) 355; Lin'an (临安), Anonymous 28830 (PE, IBK), M. B. Deng (邓懋彬) 4475; Without precise locality, Anonymous 1164 (IBK).

Examination of the type specimens of the two named infraspecific taxa demonstrated that the characters used to distinguish these varieties from var. *valvata* are rather variable, in the same way as the size of the leaves, the pedicels, and the sepals.

6. *Actinidia callosa* Lindl., Nat. Syst., ed. 2, 439. 1835. Type: Nepal. Wallich 6634 (isotype, NY!).

硬齿猕猴桃

6a. *Actinidia callosa* var. *discolor* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 315. 1984. Type: China. Guangxi (广西): He Xian (贺县), in sparse forest, alt. 500 m, 1959-10-11, Z. T. Li (李中提) 603855 (holotype, IBK!).

A. fanjingshanensis S. D. Shi & Q. B. Wang in Acta Bot. Yunnan. 16: 345. 1994, syn. nov. Type: China. Guizhou (贵州): Fanjing Shan (梵净山), alt. 580 m, 1991-10-15, Q. B. Wang et al. (王庆斌等) 91001 (holotype, GBG; isotype, KUN!).

异色猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. **Anhui** (安徽): Huang Shan (黄山), Y. Zhou (邹垣) 1742; Qimen (祁门), M. B. Deng (邓懋彬) 5257, 4882, 5295; Xiuning (休宁), Anonymous 2199, 2424; Without precise locality, R. C. Ching (秦仁昌) 3269, Y. S. Yu (虞岳世) 30395. **Fujian** (福建): Changting (长汀), Y. Ling (林镕) 4909, 5221, 4956; Dehua (德化), Anonymous 274, 275; Jianning (建宁), D. Q. Wang (汪定勤) 82-1, C. J. Chen et al. (陈家瑞等) 61; Jianyang (建阳), Wuyishan Exped. (武夷山队) 1423, C. P. Tsien (简焯坡) 400233; Liancheng (连城), Y. Ling (林镕) 3888; Nanjing (南靖), Xiamen Univ. Exped. (厦大采集队) 1199, 388; Shanghang (上杭), L. K. Ling (林来官) 3551, 3661; Shunchang (顺昌), M. S. Li (李明生) 5494, Z. Y. Li & M. S. Li (李振宇, 李明生) 5172, 4476; Taining (泰宁), M. S. Li (李明生) 660, G. D. Ye (叶国栋) 2096; Sanyuan (三元), L. K. Ling (林来官) 477, 257, Y. Lin (林英) 237; Yong'an (永安), Y. Ling (林镕) 2926, D. S. Wang (王大顺) 469. **Guangdong** (广东): Dapu (大埔), W. T. Tsang (曾怀德) 21150; Heping (和平), C. F. Wei (卫兆芬) 120305; Huidong (惠东), C. F. Wei (卫兆芬) 121109; Liannan (连南), P. C. Tan (谭沛祥) 59059; Lianping (连平), H. Y. Liu (刘焕英) 143; Lechang (乐昌), Z. Wang (黄志) 31419; Raoping (饶平), X. G. Li (李学根) 20072; Ruyuan (乳源), Z. Wang (黄志) 43879; Wengyuan (翁源), X. Q. Liu (刘心祈) 25169; Xinfeng (新丰), L. Deng (邓良) 8109; Xinyi (信宜), Z. Wang (黄志) 32298, S. P. Ko (高锡朋) 51377; Yangshan (阳山), L. Deng (邓良) 1527; Zengcheng (增城), W. T. Tsang (曾怀德) 20304. **Guangxi** (广西): Lingyun (凌云), Z. T. Li (李中提) 603116; Longlin (隆林), Y. K. Li (李荫昆) 397; Rong Xian (容县), S. H. Chun (陈少卿) 9662, 9831, 9540. **Hubei** (湖北): Wuhan (武汉), X. W. Li (李新伟) 629 (HIB); Without precise locality, K. R. Liu (刘克荣) 732. **Hunan** (湖南): Qianyang (黔阳), Anjiang Agric. School (安江农校) 1299, 888, 436, 419, 442, 220, 530, 880, 1300; Yizhang (宜章), L. H. Liu (刘林翰) 10277; Yongshun (永顺), L. H. Liu (刘林翰) 9529; Xuefeng Shan (雪峰山), Z. T. Li (李泽棠) 2176, 2144, 2120, 2580; Without precise locality, P. C. Tam (谭沛祥) 63783. **Jiangxi** (江西): Anfu (安福), Anonymous 1913; Anyuan (安远), C. M. Hu (胡启明) 2164, 2007; Dayu (大余), J. S. Yue (岳俊三) 1447; Dexing (德兴), M. X. Nie (聂敏祥) 5374; Fengxing (奉新), S. L. Liu (刘守炉) 1275, S. S. Lai (赖书绅) 1127, S. S. Lai & D. F. Huang (赖书绅, 黄大付) 1041; Guangchang (广昌), J. S. Yue (岳俊三) 2606; Guangfeng (广丰), M. X. Nie (聂敏祥) 5661; Guixi (贵溪), M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 3934; Huichang (会昌), C. M. Hu (胡启明) 3413; Ji'an (吉安), Anonymous (70) 273, (70) 275, Jiangxi Exped. (江西队) 386; Jing'an (靖安), C. M. Tan (谭策铭) 95363a, S. S. Lai (赖书绅) 1281; Jinggang Shan (井冈山), Anonymous (70) 196, J. S. Yue (岳俊三) 5335, J. Xiong (熊杰) 2612; Lichuan (黎川), M. K. Wang (王名金) 2382, M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 3401, 2780; Longnan (龙南), Anonymous 1264; Lu Shan (庐山), Y. G. Xiong (熊耀国) 9712; Nanfeng (南丰), M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 2453, Anonymous 650250; Ningdu (宁都), C. M. Hu (胡启明) 5555; Ruijin (瑞金), C. M. Hu (胡启明) 3503, 4215; Saiyang (赛阳), M. X. Nie (聂敏祥) 7198; Shangrao (上饶), M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 4949, 4957; Shangyou (上犹), Jiangxi Exped. (江西队) 383; Shicheng (石城), C. M. Hu (胡启明) 5016, 5098, 4781; Suichang (遂川), No. 236 Exped. (236任务组) 734; Wanzai (万载), S. S. Lai & D. F. Huang (赖书绅, 黄大付) 1593; Wugong Shan (武功山), Jiangxi Exped. (江西队) 204, 335, 431, J. S. Yue (岳俊三) 3039; Wuning (武宁), C. M. Tan (谭策铭) 941337, S. S. Lai (赖书绅) 2553; Wuyi Shan (武夷山), Z. G. Mao (毛宗国) 10509; Xihu (西湖), X. Li & C. Chen (李馨, 陈策) 908; Xiushui (修水), S. S. Lai (赖书绅) 3430, C. M. Tan (谭策铭) 94704, Y. G. Xiong (熊耀国) 6520; Xunwu (寻乌), Anonymous 1321, C. M. Hu (胡启明) 1480; Yifeng (宜丰), S. S. Lai (赖书绅) 192; Yongxin (永新), S. S. Lai (赖书绅) 1175; Yongxiu (永修), S. S. Lai (赖书绅) 2029; Yushan (玉山), M. X. Nie (聂敏祥) 6470; Zixi (资溪), M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 3400. **Taiwan** (台湾): Nantou (南投), R. J. Peng (彭仁杰) 640; Taibei (台北), A. Bartholomew 7823, 7678. **Zhejiang** (浙江): Chun'an (淳安), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 27787; Jiande (建德), Anonymous 29364, Hangzhou Bot. Gard. (杭州植物园) 29292, Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 27052; Kaihua (开化), Anonymous 29708, J. X. Wang (王景祥) 1793, 2113, Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 27003, G. R. Chen (陈根容) 2458; Lin'an (临安), Anonymous 28636, 28687, 26871, M. B. Deng (邓懋彬) 4804, 4771, X. Y. Ho (贺贤育) 23447, 29892, Zhejiang For. College (浙江林学院) 832084, X. Li (李新) J8112-050; Lishui (丽水), S. Y. Chang (章绍尧) 6362, 6204; Longquan (龙泉), Anonymous 9016, S. Y. Chang (章绍尧) 6753, 3006, 3872, C. F. Zhang (张朝芳) 30; Ningbo (宁波), Anonymous 1125, G. R. Chen (陈根容) 2292; Suichang (遂昌), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 25780; Taishun (泰顺), S. Y. Chang

(章绍尧) 3612, 5529; Yingchuan (英川), S. Y. Chang (章绍尧) 4878; Zhuji (诸暨), X. Li (李新) J8212153.

In establishing *A. fanjingshanensis*, Shi et al. (1994) only compared their new species with *A. umbelloides* C. F. Liang, but not with *A. callosa* var. *discolor*. Examination of an isotype of *A. fanjingshanensis* in KUN points its identity as the common *A. callosa* var. *discolor*.

6b. *Actinidia callosa* var. *henryi* Maxim. in Trudy Imp. S.-Peterburgsk. Bot. Sada 11: 36. 1890. Type: China. Hubei (湖北): Yichang (宜昌), *A. Henry* 3494, 3955, 4377 (syntypes, GH!).

A. callosa var. *ephippioidea* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 315. 1984, syn. nov. Type: China. Yunnan (云南): Fengqing (凤庆), alt. 2400 m, 1938-07-09, T. T. Yu (俞德浚) 16621 (holotype, PE!).

京梨猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), T. L. Dai (戴天伦) 106548, 103912, 100234, 100422, 100186, 103066, 100468, 102851, C. H. Chu (曲仲湘) 2140; Fengjie (奉节), H. F. Zhou & H. Y. Su (周洪富, 粟和毅) 109171, 109297, 107888, H. F. Zhou (周洪富) 26420, T. Y. Chang (张泽荣) 25127; Hechuan (合川), T. H. Tu (杜大华) 5292; Nanchuan (南川), G. F. Li (李国凤) 60995, 62413, 63614, 61627, 61987, 63450, J. H. Xiong & Z. L. Zhou (熊济华, 周子林) 91451, 92415, 90697, 90938, 93628, 92772, W. P. Fang (方文培) 1350, 827, 1079, 1113, K. C. Kuan *et al.* (关克俭等) 1371, Jinfoshan Exped. (金佛山考察队) 2410, F. T. Wang (汪发纛) 10457, Science Institute of W. China (中国西部科学院) 3183; Wuxi (巫溪), C. H. Chu (曲仲湘) 1896, G. H. Yang (杨光辉) 58695, 65102; Wu Shan (巫山), G. H. Yang (杨光辉) 59680, 58176, 59911, H. F. Zhou & H. Y. Su (周洪富, 粟和毅) 109769, 110141; Xiushan (秀山), Science Instit. W. China (中国西部科学院) 3971; Youyang (酉阳), Z. Y. Liu (刘正宇) 6347, SW Normal Univ. Biol. Depart. (西南师范大学生物系) 2302. **Fujian** (福建): Wuyishan Shi (武夷山市), Wuyishan Exped. (武夷山队) 851, M. Suzuki *et al.* 98165; Xianyou (仙游), Y. Lin (林英) 450. **Gansu** (甘肃): Wen Xian (文县), J. Q. Fu (傅竞秋) 2649, Z. Y. Zhang (张志英) 14384, Q. X. Li (李全喜) 2514, Y. S. Lian (廉永善) 93-497. **Guangxi** (广西): Lingui (临桂), Z. Z. Chen (陈照宙) 50998, 50985; Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 245, 359, 699, 238, 970; Rongshui (融水), S. H. Chun (陈少卿) 16928, 17119, Q. H. Lü (吕清华) 3538; Xing'an (兴安), G. Z. Li (李光照) 15194. **Guizhou** (贵州): Anlong (安龙), Guizhou Exped. (贵州队) 5192, 5224, 4957; Bijie (毕节), P. H. Yu (禹平华) 225; Ceheng (册亨), Z. Y. Cao (曹子余) 520; Dafang (大方), Bijie Exped. (毕节队) 1065; Dejiang (德江), N. Guizhou Exped. (黔北队) 1718, 2768; Duyun (都匀), K. M. Lan (蓝开敏) 91-0391; Fanjing Shan (梵净山), N. Guizhou Exped. (黔北队) 460, 402, P. C. Tsoong (钟补勤) 958; Fenggang (凤冈), N. Guizhou Exped. (黔北队) 2495; Huaxi (花溪), Z. Y. Cao (曹子余) 363; Huangping (黄平), S. Guizhou Exped. (黔南队) 2527; Jiangkou (江口), Sino-Amer. Guizhou Bot. Exped. (中美贵州植考队) 905, C. P. Tsien (简焯坡) 32249; Kaili (凯里), S. Guizhou Exped. (黔南队) 3464, 1997, 1876, 1365, 1011, 2319; Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 3672; Leishan (雷山), C. P. Tsien (简焯坡) 51136, 50644, 50338; Libo (荔波), Libo Exped. (荔波队) 1045; Macao (马槽), N. Guizhou Exped. (黔北队) 584; Nayong (纳雍), Bijie Exped. (毕节队) 326, 478; Rongjiang (榕江), S. Guizhou Exped. (黔南队) 3019; Shiqian (石阡), S. Guizhou Exped. (黔南队) 2597; Songtao (松桃), N. Guizhou Exped. (黔北队) 1871, 1334, Sino-Amer. Guizhou Bot. Exped. (中美贵州植考队) 1883; Wangmo (望谟), Guizhou Exped. (贵州队) 1030; Weng'an (瓮安), Libo Exped. (荔波队) 1989, 1754; Wudong (乌东), C. P. Tsien (简焯坡) 50413; Xishui (习水), K. M. Lan (蓝开敏) 95; Xingren (兴仁), Guizhou Exped. (贵州队) 8688, C. Z. Dang & P. Dang (党成忠, 党平) 125, 231; Yanhe (沿河), N. Guizhou Exped. (黔北队) 2460; Yinjiang (印江), Sino-Amer. Guizhou Bot. Exped. (中美贵州植考队) 1408, 1777, 1405, N. Guizhou Exped. (黔北队) 740, 671, 751, C. P. Tsien (简焯坡) 30376, 31232, 31380, 30978; Zheng'an (正安), P. C. Tsoong (钟补勤) 564; Zunyi (遵义), Sichuan-Guizhou Exped. (川黔队) 1295, 1222. **Hubei** (湖北): Badong (巴东), Hubei Bot. Exped. (鄂植考队) 24599, 24109, T. P. Wang (王作宾) 11063, H. C. Chow (周鹤昌) 836; Danjiangkou (丹江口), K. R. Liu (刘克荣) 56; Fang Xian (房县), K. M. Liu (刘继孟) 9243; Hefeng (鹤峰), F. S. Peng (彭辅松) 1057, 134; Jianshi (建始), H. C. Chow (周鹤昌) 1633; Lichuan (利川), G. X. Fu &

Z. S. Zhang (傅国勋, 张志松) 1791, 1827, 1787, W. C. Cheng & C. T. Hwa (郑万钧, 华敬灿) 567, W. B. Lin (林文豹) 456, L. Y. Dai & Z. H. Qian (戴伦膺, 钱重海) 1077, Z. C. Ye (叶之池) 560; Xianfeng (咸丰), H. J. Li (李洪钧) 9137, 9454; Xuan'en (宣恩), H. J. Li (李洪钧) 2818, 2770, 3137; Xingshan (兴山), H. J. Li (李洪钧) 1293, 481, Y. Liu (刘瑛) 651; Without precise locality, E. H. Wilson 512. **Hunan** (湖南): Longshan (龙山), L. H. Liu (刘林翰) 1617; Qianyang (黔阳), Anjiang Agric. School (安江农校) 1184; Sangzhi (桑植), B. G. Li & S. B. Wang (李丙贵, 万绍斌) 750108; Wugang (武冈), L. H. Liu & G. Z. He (刘林翰, 何观州) 16050; Xinning (新宁), Anonymous 701, 954, Z. C. Luo (罗仲春) 204, L. H. Liu (刘林翰) 15353, Ziyunshan Exped. (紫云山队) 890; Xuefeng Shan (雪峰山), Z. T. Tang (李泽棠) 2020, 2002, 1991, 1184; Yizhang (宜章), Anonymous 812; Yongshun (永顺), Hunan Exped. (湖南队) 46; Without precise locality, P. C. Tam (谭沛祥) 62017, 62111, 62458, 64018, X. G. Li (李学根) 204611. **Jiangxi** (江西): Tongu (铜鼓), S. S. Lai (赖书绅) 3541; Shangrao (上饶), M. X. Nie (聂敏祥) 5040. **Shaanxi** (陕西): Pingli (平利), Y. L. Qiao (乔英林) 1136, K. M. Liu (刘继孟) 8369; Shanyang (山阳), J. X. Yang (杨金祥) 2786; Yang Xian (洋县), J. X. Yang (杨金祥) 1550, T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 3789. **Sichuan** (四川): Baoxing (宝兴), Nanshuibeidiao Exped. (南水北调队) 10187, T. P. Soong (宋滋圃) 38138, K. C. Kuan & W. T. Wang (关克俭, 王文采) 2683; Cangxi (苍溪), Sichuan Econ. Pl. Exped. (川经队) 0590, 2716; Daba Shan (大巴山), P. C. Tsoong (钟补求) 3789; Dujiangyan (都江堰), F. T. Wang (汪发缙) 20812; Ebian (峨边), T. T. Yu (俞德浚) 738; Emei Shan (峨眉山), G. H. Yang (杨光辉) 55110, 54527, 57118, 57342, 56868, S. X. Wang (王蜀秀) 474, W. P. Fang (方文培) 16823, 20524, 18655, 16990, 20095, H. G. Xu (徐洪贵) 2300, F. T. Wang (汪发缙) 23590b, J. H. Xiong (熊济华) 30436, 32729; Jincheng Shan (金城山), Sichuan Econ. Pl. Exped. (川经队) 0006; Junlian (筠连), Sichuan Econ. Pl. Exped. (川经队) 91; Leibo (雷波), Sichuan Econ. Pl. Exped. (川经队) 249, 0405, Z. T. Guan (管中天) 9491, 8256, Q. S. Zhao (赵清盛) 1531; Mabian (马边), F. T. Wang (汪发缙) 22874, W. P. Fang (方文培) 23087; Pingwu (平武), Anonymous 10200, X. L. Jiang (蒋兴麟) 11091, H. Y. Su (粟和毅) 050; Songpan (松潘), Sichuan Econ. Pl. Exped. (川经队) 1746; Tianquan (天全), Sichuan Econ. Pl. Exped. (川经队) 475, Nanshuibeidiao Exped. (南水北调队) 1760, W. K. Hu (胡文光) 34700, G. F. Li (李国凤) 63377; Wanyuan (万源), P. Y. Li (李培元) 5475; Wenchuan (汶川), Anonymous 8375. **Yunnan** (云南): Duguan (大关), B. S. Sun (孙毕兴) 0611; Dali (大理), H. C. Wang (王汉臣) 4773; Fengqing (凤庆), T. T. Yu (俞德浚) 15998, 16150, 16613; Fugong (福贡), Qinghai-Xizang Exped. (青藏队) 7152; Funing (富宁), C. W. Wang (王启无) 87161, 87083, 88886; Jingdong (景东), B. Y. Qiu (邱炳云) 53522, 53067, S. G. Xu (许溯桂) 5038; Liangshan (凉山), H. T. Tsai (蔡希陶) 51342; Lincang (临沧), T. T. Yu (俞德浚) 17780; Malong (马龙), Y. H. Li (李延辉) 240; Menghai (勐海), C. W. Wang (王启无) 73984, 77266; Pingbian (屏边), H. T. Tsai (蔡希陶) 62630, P. I. Mao (毛品一) 2408, C. W. Wang (王启无) 82564, K. M. Feng (冯国楣) 4947; Songming (嵩明), B. Y. Qiu (邱炳云) 54947; Suijiang (绥江), B. S. Sun (孙必兴) 0180; Wen Shang (文山), Y. M. Shui (税玉民) 2745, 3143, 3141; Xichou (西畴), C. W. Wang (王启无) 85270; Yiliang (彝良), NE Yunnan Exped. (滇东北队) 868; Zhenxiang (镇雄), H. T. Tsai (蔡希陶) 52686, 52671.

A specimen from the same locality as the type specimens of *A. callosa* var. *ephippioidea* has sharply serrate leaf margins, pointing to the variability of the serrature, by which it is distinguished from other varieties. Judging from the shape of the leaves of the type, this named variety should be united with *A. callosa* var. *henryi*.

7. *Actinidia cylindrica* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 315. 1984. Type: China. Guangxi (广西): Rongshui (融水), Luodong (罗洞), Sancha (三岔), near mountain road, alt. 600 m, 1957-06-06, T. C. Chen (陈德昭) 476 (holotype, IBK!).

A. cylindrica f. *obtusifolia* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 316. 1984, syn. nov. Type: China. Guangxi (广西): Rongshui (融水), alt. 450 m, 1958-05-29, S. H. Chun (陈少卿) 14098 (holotype, IBK!).

A. cylindrica var. *albiflora* R. G. Li & J. W. Li in Guihaia 22: 385. 2002, syn. nov. Type: China. Guangxi (广西): Guilin (桂林), 1998-04, M. Y. Liang & R. G. Li 9804 (梁木源, 李瑞高) (holotype, IBK!).

柱果猕猴桃

Specimens examined:

China. Guangxi (广西): Jiuwan Shan (九万山), Z. Y. Wei (韦占业) 1213 (IBK); Luocheng (罗城) R. G. Li & C. G. Huang (李瑞高, 黄陈光) 1046 (IBK); Rongshui (融水), Y. H. Yao (姚云海) 2010 (IBK), C. G. Huang (黄陈光) s.n. (IBK), 2013 (IBK), S. H. Chun (陈少卿) 14170 (PE, KUN, IBK), 15876 (PE, KUN, IBK), 15282 (PE, KUN), Q. H. Lü (吕清华) 2674 (PE, IBK), 2423 (IBK); Sanjiang (三江), C. G. Huang (黄陈光) 1008 (IBK),

Within the genus *Actinidia*, leaves show great variation, even in the same specimen. It is not appropriate to establish a taxon based on leaf shape, as is the case with *A. cylindrica* forma *obtusifolia*. When *A. cylindrica* was published, no flowers were observed. Thus, it is justifiable to relegate *A. cylindrica* var. *albiflora* into synonymy.

8. *Actinidia laevissima* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 317, 1984. Type: China. Guizhou (贵州): Jiangkou (江口), alt. 1700 m, 1964-06-03, Z. S. Zhang *et al.* (张志松等) 402236 (holotype, PE!).

A. jiangkouensis S. D. Shi & Z. C. Zhang in Acta Bot. Yunnan. 16: 345. 1994, syn. nov. Type: China. Guizhou (贵州): Jiangkou (江口), Shuangjiang (双江), alt. 530 m, 1992-10-20, Q. B. Wang *et al.* (王庆斌等) 92025 (holotype, GBG; isotype, KUN!).

A. laevissima var. *floscula* S. D. Shi in Acta Bot. Yunnan. 16: 346. 1994, syn. nov. Type: China. Guizhou (贵州): Yinjiang (印江), Qishuping (漆树坪), alt. 1040 m, S. D. Shi (时圣德) 92013 (holotype, GBG; isotype, KUN!).

滑叶猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Guizhou (贵州): Fanjing Shan (梵净山), Science Institute of W. China (中国西部科学院) 3480, P. C. Tsoong (钟补勤) 1796; Jiangkou (江口), Z. S. Zhang (张志松) 402043 (PE, IBSC), 400762 (PE, IBSC), 401348 (PE, IBSC). **Hubei** (湖北): Xuan'en (宣恩), H. J. Li (李洪钧) 5096, 3750, 3888.

Actinidia laevissima is readily distinguished by its conspicuous prominent lenticels on the branchlets. The leaves on the type specimens are thinly coriaceous. Other specimens, which are attributable to this species, sometimes have thickly coriaceous leaves. An examination of the type of *A. jiangkouensis*, an isotype in KUN, shows that the specimen belongs to *A. laevissima*. Consequently, *A. jiangkouensis* should be relegated into synonymy. Furthermore, the number of petals in the flowers on the same specimen ranges from 4 to 5. The name *A. laevissima* var. *floscula* S. D. Shi is superfluous.

9. *Actinidia fortunatii* Finet & Gagnep. in Bull. Soc. Bot. France 53: 574. 1906. Type: China. Guizhou (贵州): Pingfa (平伐), *Cavalerie & Fortunat* 2350 (isotype, A!).

A. glaucophylla F. Chun var. *asymmetrica* (F. Chun) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 234. 1984, syn. nov. — *Actinidia asymmetrica* F. Chun in Sunyatsenia 7: 13. 1948. Type: China. Guangxi (广西): Wuming (武鸣), Daming Shan (大明山), Liu 566 (holotype, IBSC!).

A. gracilis C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 316. 1984, syn. nov. Type: China. Guangxi (广西): Du'an (都安), 1957-10-22, Y. K. Li (李荫昆) P0-1827 (holotype, IBK!).

A. glaucophylla F. Chun var. *rotunda* C. F. Liang in Guihaia 2 (1): 4. 1982, syn. nov. Type: China. Guangxi (广西): Daxin (大新), 1981-04-11, H. N. Qin (覃海宁) 59 (holotype, IBK!).

A. glaucophylla F. Chun var. *robusta* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 317. 1984, syn. nov. Type: China. Guangxi (广西): Longsheng (龙胜), alt. 980 m, 1955-06-07, Guangfu For. Exped. (广福林区采集队) 700486 (holotype, IBK!).

条叶猕猴桃

Specimens examined (if not designated, specimens are deposited in PE).

China. Guangdong (广东): Gudou Shan (古兜山), M. X. Huang (黄茂先) 110059; Gaoyao (高要), Y.

G. Liu (刘英光) 1749; Lechang (乐昌), J. L. Zuo (左景烈) 20682 (IBK), W. T. Tsang (曾怀德) 20873; Renhua (仁化), L. Deng (邓良) 7681 (PE, IBK, KUN); Ruyuan (乳源), Anonymous 73604, L. Deng (邓良) 5634 (PE, IBK), S. P. Ko (高锡朋) 52835, 52844 (PE), 54698 (IBK), X. Q. Liu (刘心祈) 28914 (IBK), Z. Wang (黄志) 43905 (PE, KUN), 44193 (PE, KUN); Xinyi (信宜), S. P. Ko (高锡朋) 51334 (PE, IBK), 51368 (PE, IBK); Yangshan (阳山), L. Deng (邓良) 1171 (PE, KUN), 1379 (KUN), 7681 (KUN). **Guangxi** (广西): Binyang (宾阳), Z. Z. Chen (陈照宙) 50560 (PE, KUN, IBK); Daming Shan (大明山), C. X. Cai (蔡灿星) 5159 (IBK), G. Z. Li & S. C. Tang (李光照, 唐赛春) 401 (IBK); Donglan (东兰), Z. Wang (黄志) 43561 (IBK); Fuchuan (富川), Z. T. Li (李中提) 603762 (IBK), 604054 (IBK); Gongcheng (恭城), Gongcheng Exped. (恭城调查队) 0248 (IBK), 102 (IBK); Guanyang (灌阳), Z. Z. Chen (陈照宙) 52209 (IBK); Heng Xian (横县), Z. Z. Chen (陈照宙) 50485 (PE, KUN, IBK); Huanjiang (环江), S. H. Chun (陈少卿) 15481 (PE); Qinzhou (钦州), P. C. Zhou (周沛春) 80066; Lingui (临桂), C. F. Liang (梁畴芬) 30607 (IBK), 30963 (IBK), 31709 (IBK), 30309 (IBK), 31607 (IBK), G. Z. Chen (陈光宙) 50838 (IBK), H. Liang (梁恒) 100250 (IBK), S. L. Huang (黄泗龙) 8047 (IBK), Z. D. Qin (秦宗德) 9072 (IBK), 50852 (PE, KUN), 50962 (PE, IBK), 50934 (PE, KUN), 50965 (PE, KUN, IBK), 50806 (KUN, IBK); Longsheng (龙胜), D. A. Huang (黄德爱) 60183 (IBK), 60141 (IBK), 60080 (IBK), 60089 (IBK), Guangfu For. Exped. (广福林区采集队) 215 (PE, IBK), 332 (PE, IBK), 330 (PE, IBK), 256 (PE, IBK), 720 (IBK), H. F. Qin & S. L. Yu (秦灏富, 余少林) 700488 (IBK), H. F. Qin & Z. T. Li (秦灏富, 李中提) 70171 (IBK), 71087 (IBK), 70538 (IBK), Q. H. Lü & Y. Z. Wei (吕清华, 韦裕宗) 20542 (IBK), 20530 (IBK); Luocheng (罗城), C. H. Tsoong (钟济新) 83800 (IBK), R. C. Ching (秦仁昌) 5828, 6085, Mashan (马山), S. Q. Zhong (钟树权) A62262 (PE, IBK), A62283 (IBK), Y. C. Chen (陈永昌) 479 (IBK); Nanning (南宁), R. C. Ching (秦仁昌) 8362; Ningming (宁明), C. C. Chang (张肇骞) 12047 (IBK), 12826 (IBK); Quanzhou (全州), C. H. Tsoong (钟济新) 81581 (IBK); Rongshui (融水), T. C. Chen (陈德昭) 452 (IBK), Q. H. Lü (吕清华) 3574, 3292, 2733, 2685 (PE, KUN), 3539, 2423 (IBK), S. H. Chun (陈少卿) 14990 (PE, IBK), 15873 (PE, IBK), 14208, 16785 (PE, KUN), 16867 (KUN), 8779 (IBK), Liuzhou Exped. (柳州队) 3539 (IBK), 2733 (IBK), 3292 (IBK), 2685 (IBK); Sanjiang (三江), C. F. Liang (梁畴芬) 34235 (IBK), G. Z. Li (李光照) 14 (IBK); Shangsi (上思), W. Y. Lian (连文琰) 1024 (IBK), W. T. Tsang (曾怀德) 22196 (IBK); Xing'an (兴安), S. L. Yu (余少林) 900116 (IBK, PE), C. G. Huang (黄陈光) 1014 (IBK), Guangxi Exped. (广西队) 801, 666, 510, 2588, 2453, C. H. Tsoong (钟济新) 81719 (PE, IBK), Q. K. Jiang (蒋庆坤) 26 (IBK), S. G. Li (李树刚) 30-26 (IBK), Z. Z. Chen (陈照宙) 51336 (PE, KUN, IBK), 51472 (PE, KUN, IBK), 51666 (KUN, IBK), 51510 (KUN, IBK); Ziyuan (资源), D. A. Huang (黄德爱) 60908 (IBK), 600484 (IBK). **Guizhou** (贵州): Anlong (安龙), Guizhou Exped. (贵州队) 4738, 3018; Kaili (凯里), S. Guizhou Exped. (黔南队) 2277, 1261 (PE, KUN), 1441 (PE, KUN); Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 3782 (PE, KUN); Leishan (雷山), G. H. Yang (杨光辉) 05 (IBK), C. P. Tsien (简焯坡) 50027 (PE, KUN), 50295 (PE, KUN), 50571 (PE, KUN), 50904 (KUN); Rongjiang (榕江), S. Guizhou Exped. (黔南队) 3156, 3271 (PE), C. P. Tsien (简焯坡) 51715. **Hunan** (湖南): Chengbu (城步), Q. Z. Lin (林亲众) 10952 (IBK), T. R. Cao (曹铁如) 830157 (IBK), 830151 (IBK), 30 (IBK); Dao Xian (道县), P. C. Tam (谭沛祥) 62840 (IBK), 63751 (IBK), 61375 (IBK), 63725 (IBK); Dong'an (东安), Y. Liu 801 (刘瑛); Dongkou (洞口), P. C. Tam (谭沛祥) 63049 (IBK), 62718 (IBK), Z. Y. Yang (杨泽永) 1101 (IBK); Jianghua (江华), B. G. Li & S. B. Wan (李丙贵, 万绍斌) 5159 (PE, KUN); Jiangyong (江永), P. C. Tam (谭沛祥) 62288 (IBK); Ningyuan (宁远), P. C. Tam (谭沛祥) 62549 (IBK), 61700 (IBK); Xinning (新宁), Anonymous 671, L. H. Liu (刘林翰) 15225 (PE, KUN), Ziyunshan Exped. (紫云山队) 671 (IBK); Yizhang (宜章), B. H. Liang (梁宝汉) 83497 (IBK), L. H. Liu (刘林翰) 10568 (KUN), S. H. Chun (陈少卿) 2534 (IBK), 2845 (IBK); Yongshun (永顺), Beijing Exped. (北京队) 922 (KUN).

In the present treatment, we follow Li's opinion (1952) to place *A. glaucophylla* as a synonym of *A. fortunatii*. Examination of a series of specimens belonging to these named taxa showed that the leaves are lanceolate to ovate to rounded, basally rounded to cordulate to obviously cordate-auricular, and the size larger, and slightly longer than the peduncle. Since the leaf variation between *A. glaucophylla* var. *glaucophylla* and var. *asymmetrica*, as well as var. *rotunda*, is continuous, var. *asymmetrica* and var. *rotunda* are here treated as synonyms.

A few specimens from the locality of the type specimen of *A. glaucophylla* var. *robusta*

do not exhibit the characters on which *A. glaucophylla* var. *robusta* was established, indicating that the characters rarely present or that they are not stable. In addition, the diagnostic characters of *A. glaucophylla* var. *robusta* are not correlated with each other. Therefore, the name *A. glaucophylla* var. *robusta* cannot be maintained.

As regards *A. gracilis* C. F. Liang, it is difficult to determine whether its leaves are glaucous by examining the holotype in IBK, but the leaves of the isotype in IBSC are obviously glaucous abaxially, which is contrary to Liang's protologue (Liang, 1984). Furthermore, the cylindric fruit with pale lenticels, white lamellate pith, and lanceolate-ovate leaves point its identity as *A. glaucophylla*.

10. *Actinidia indochinensis* Merr. in Journ. Arn. Arb. 19: 53. 1938. Type: Vietnam. Chapa: A. Petelot 5938 (holotype, A!).

A. flavofloris H. Z. Jiang in Journ. Southwest Agric. Univ. 17 (2): 94. 1995, syn. nov. Type: China. Yunnan (云南): Hekou (河口), 1989-05-25, S. S. Sun et al. (孙旭绍等) 89-3002 (holotype, YAA (Herbarium of Institute of Horticulture, Yunnan Academy of Agricultural Sciences)).

中越猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Liancheng (连城), H. B. Chen (陈恒彬) 711. **Guangdong** (广东): Gaozhou (高州), P. C. Zhou (周沛春) 10412; Xinyi (信宜), S. P. Ko (高锡朋) 51247 (PE, KUN), Z. Wang (黄志) 37937. **Guangxi** (广西): Nanning (南宁), R. C. Ching (秦仁昌) 7875; Pingxiang (凭祥), Beijing Youth Exped. (北京青年队) 902; Rong Xian (容县), S. H. Chun (陈少卿) 9849 (PE, KUN). **Yunnan** (云南): Malipo (麻栗坡), K. M. Feng (冯国楣) 022953 (KUN); Pingbian (屏边), P. I Mao (毛品一) 3843 (PE, KUN), 2725 (PE, KUN), 2541, 4113 (KUN), C. W. Wang (王启无) 82608 (PE, KUN); Maguan (马关), Q. A. Wu (武全安) 8537 (KUN); Xichou (西畴), C. W. Wang (王启无) 85443 (PE, KUN), Q. A. Wu (武全安) 362-071 (KUN).

Actinidia flavofloris was described based on a single specimen, which, unfortunately, could not be located. The author characterized *A. flavofloris* by its 3–8-flowered inflorescences and yellow flowers. The inflorescences of *A. indochinensis* are generally 1–3-flowered, and the flowers are white. Since the color of flowers varies considerably within *Actinidia*, while the number of flowers in an inflorescence is contiguous between *A. flavofloris* and *A. indochinensis*, we treat *A. flavofloris* H. Z. Jiang as conspecific with *A. indochinensis*.

11. *Actinidia rudis* Dunn in Journ. Linn. Soc. Bot. 39: 408. 1911. Type: China. Yunnan (云南): Mengzi (蒙自), A. Henry 11307 (isotype, NY!).

Actinidia petelotii Diels in Notizbl. Bot. Gart. Berlin 11: 213. 1931, syn. nov. Type: Vietnam. Chapa: A. Petelot 3829 (isotype, NY!).

糙叶猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Yunnan (云南): Hekou (河口), Y. M. Shui (税玉民) 1084; Mengzi (蒙自), T. N. Liou (刘慎谔) 19020; Pingbian (屏边), H. T. Tsai (蔡希陶) 61052 (PE, KUN), 60073 (PE, KUN), 55137 (PE, KUN), 61944 (PE, KUN), 55429 (PE, KUN), 60765 (PE, KUN), 60483 (PE, KUN), Sino-Russia Exped. (中苏队) 2035 (PE, KUN), 4488, 3628 (KUN), P. I Mao (毛品一) 2560 (PE, KUN), 2635 (PE, KUN), 2240 (PE, KUN), 4125, 4942 (KUN), 2695 (KUN), 3975 (PE, KUN), K. M. Feng (冯国楣) 1942, 4489; Wenshan (文山), Q. A. Wu (武全安) 7509 (KUN).

The young leaves in this species are usually more or less densely strigose on both surfaces, as are the mature leaves. On one specimen, the young leaves were densely strigose on both sides, but only sparsely strigose on the midveins abaxially and sparsely strigose adaxially, indicating that the density of hairs on the leaves varies. Examination of the type of *A. petelotii* showed that it is very similar to that of *A. rudis*. Therefore, we consider *A. petelotii* to be only a form of *A. rudis*, having sparse hairs on the leaves.

12. *Actinidia henryi* Dunn in Bull. Misc. Inform. Kew 1906: 1. 1906. Type: China. Yunnan (云南): Mengzi (蒙自), *A. Henry 10381a* (isotype, NY!).

A. carnosifolia C. Y. Wu in Fl. Yunnan. 1: 60. 1977, syn. nov. Type: China. Yunnan (云南): Malipo (麻栗坡), Laojun Shan (老君山), 1962-05-25, *K. M. Feng* (冯国楣) 22768 (holotype, KUN!).

A. carnosifolia var. *glaucescens* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 318. 1984, syn. nov. Type: China. Guangxi (广西): Longsheng (龙胜), alt. 1140 m, 1955-07-24, *Guangfu For Exped.* (广福林区采集队) 996 (holotype, IBK!).

A. henryi var. *glabricaulis* (C. Y. Wu) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 248, syn. nov. — *A. rudis* Dunn var. *glabricaulis* C. Y. Wu in Fl. Yunnan. 1: 57. 1977. Type: China. Yunnan (云南): Sichou (西畴), Nanchang (南昌), 1959-05-10, *Q. A. Wu* (武全安) 8085 (holotype, KUN!).

蒙自猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Guangdong (广东): Deqing (德庆), Y. G. Liu (刘英光) 964; Dinghu (鼎湖), G. L. Shi (石国良) 13545; Ruyuan (乳源), Y. G. Liu (刘英光) 479, 481; Maoming (茂名), L. Deng (邓良) 2286 (PE, KUN); Xinyi (信宜), Z. Wang (黄志) 32297 (PE, KUN); Yangshan (阳山), L. Deng (邓良) 1379. **Guangxi** (广西): Longsheng (龙胜), *Guangfu For. Exped.* (广福林区采集队) 705 (KUN), 996 (KUN), 227; Luocheng (罗城), R. C. Ching (秦仁昌) 5987; Napo (那坡), D. Fang (方鼎) 24998, Sino-Japan Yunnan & Guangxi Exped. (中日云南广西队) 1436 (KUN), 1718 (KUN); Rongshui (融水), Q. H. Lü (吕清华) 4365 (KUN), S. H. Chun (陈少卿) 15863 (PE, KUN), 14595 (PE, KUN), 14285 (PE, KUN), 8762 (KUN), 8809 (KUN), T. C. Chen (陈德昭) 154 (KUN), 317 (KUN), 399 (KUN), 1 (KUN); Tianlin (田林), Yunnan-Guizhou-Guangxi Exped. (滇黔桂队) 70616 (KUN), 70617 (KUN), 70615 (KUN), C. C. Chang (张肇骞) 11013 (KUN). **Guizhou** (贵州): Kaili (凯里), S. Guizhou Exped. (黔南队) 2258. **Yunnan** (云南): Eshan (峨山), Eshan Exped. (峨山队) 88-142 (KUN), 924 (KUN); Hekou (河口), W. X. Liu (刘伟心) 584 (PE, KUN), 629 (KUN), 627; Jianshui (建水), H. T. Tsai (蔡希陶) 53331 (PE, KUN); Jinping (金平), Anonymous 37 (KUN), Sino-Russia Exped. (中苏队) 1284, P. I. Mao (毛品一) 350 (PE, KUN), S. K. Wu (武素功) 4049 (KUN), 3386 (KUN), Xilongshan Exped. (西隆山考察队) 556 (KUN), 112 (KUN), Y. Y. Hu (胡月英) 60002472 (KUN), Sino-Russia Exped. (中苏队) 1284 (KUN); Malipo (麻栗坡), K. M. Feng (冯国楣) 13039; Pingbian (屏边), P. I. Mao (毛品一) 3852 (PE, KUN), C. W. Wang (王启无) 82761 (PE, KUN); Xichou (西畴), P. C. Tsoong (钟补勳) 420, K. M. Feng (冯国楣) 11776; Yuanjiang (元江), H. Sun (孙航) 15 (KUN), W. Q. Yin (尹文清) 1661 (KUN), Y. H. Li (李延辉) 5721 (KUN); Yuanyang (元阳), Lüchun Exped. (绿春队) 1990 (KUN), 1611 (PE, KUN), 1589 (KUN).

Wu compared *A. carnosifolia* with *A. henryi* and pointed out their differences as follows: *A. carnosifolia* has red flowers and fleshy, coriaceous leaves that are glaucous and sparsely setose along the midvein abaxially. While the leaves on many specimens are indeed carnosus-coriaceous, they are not glaucous abaxially; in addition, some specimens with fleshy-coriaceous leaves have white flowers. Therefore, *A. carnosifolia* cannot be differentiated from *A. henryi*. The characters of the leaves with respect to trichomes are overlapping, e.g., leaves adaxially strigose and abaxially glabrous; adaxially strigose and abaxially strigose along the midvein; glabrous on either side; and glabrous adaxially and strigose along the midvein abaxially. Thus, there is no justification to establish varieties based on trichome characters on the leaves.

Actinidia henryi Dunn var. *glabricaulis* (Liang, 1984) was a combination based on *A. rudis* Dunn var. *glabricaulis* (Wu, 1977). However, since the young leaves of the type specimen of *A. rudis* var. *glabricaulis* are densely setose on the upper side, we feel that they are more similar to *A. rudis* than to *A. henryi*, thus retaining their status as a variety of *A. rudis*.

13. *Actinidia hemsleyana* Dunn in Journ. Linn. Soc. Bot. 38: 355. 1908. Type: China. Fujian (福建): Nanping (南平), *Hongk. Herb.* 2400 (isotype, IBSC!).

A. hemsleyana Dunn var. *kengiana* (Metc.) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 249. 1984, syn. nov.—*A. kengiana* Metc. in Lingn. Sci. Journ. 11: 16. 1932. Type: China. Zhejiang (浙江): Jingning (景宁), forest understory, 1926-08-16, *Y. L. Keng* (耿以礼) 394 (holotype, A!; isotype, PE!).

长叶猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Guangze (光泽), Y. T. Chang (张永田) 79045 (IBSC); Jianning (建宁), Z. Y. Li (李振宇) 10903 (IBK); Jianyang (建阳), Wuyishan Exped. (武夷山队) 820109 (IBSC); Liancheng (连城), T. S. Wang 1037 (PE, IBSC), D. S. Wang (王大顺) 1037; Nanping (南平), G. S. He (何国生) 763, 919, 1758; Pucheng (浦城), C. P. Tsien (简焯坡) 401624; Sha Xian (沙县), L. K. Ling (林来官) 409; Shanghang (上杭), L. K. Ling (林来官) 7165; Shaowu (邵武), H. C. Zhou (周鹤昌) 6035 (IBSC, IBK); Shunchang (顺昌), M. S. Li & Z. Y. Li (李明生, 李振宇) 5285, 6518; Taining (泰宁), M. S. Li (李明生) 379 (IBSC); Wuyi Shan (武夷山), P. S. Chiu (裴佩喜) 1440, 1757, Wuyishan Exped. (武夷山队) 80-52 (IBSC), M. K. Wang (王名金) 3357, 3355 (PE, IBK); Wuyishan Shi (武夷山市), No. 236-6 Exped. (236-6队) 882, Wuyishan Exped. (武夷山队) 13 (PE, IBSC), C. P. Tsien (简焯坡) 401039, M. K. Wang (王名金) 3203 (IBK); Xianyou (仙游), Y. Lin (林英) 441; Without precise locality, Anonymous 176, 339, P. S. Chiu (裴佩喜) 1718. **Jiangxi** (江西): Qianshan (铅山), M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 4371 (IBSC, KUN, PE, IBK), Y. D. Chen (陈耀东) 1047. **Zhejiang** (浙江): Jingning (景宁), S. Y. Chang (章绍尧) 4885; Lishui (丽水), S. Y. Chang (章绍尧) 6334 (PE, KUN); Longquan (龙泉), Anonymous 7285, 8778, 299, R. H. Shan (单人骅) 5445 (PE, KUN), S. Y. Chang (章绍尧) 2888 (PE, IBSC), 7253, 7285, 2911 (PE, IBSC), Zhebo (浙博) 3528 (KUN), 3436 (IBK); Pingyang (平阳), S. Y. Chang (章绍尧) 5946 (PE, KUN); Qingyuan (庆元), S. Y. Chang (章绍尧) 3505 (PE, IBSC), C. F. Gan (甘长飞) 1 (IBK); Rui'an (瑞安), S. Y. Chang (章绍尧) 5478 (PE, KUN); Suichang (遂昌), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 25761, 25861, 26630, 26519; Taishun (泰顺), S. Y. Chang (章绍尧) 3654, 3783 (PE, IBSC), 5658 (PE, KUN), 5514 (PE, KUN); Yingchuan (英川), S. Y. Chang (章绍尧) 4885 (IBSC, KUN); Without precise locality, R. C. Ching (秦仁昌) 2120 (IBSC).

Much earlier, *A. kengiana*, on which *A. hemsleyana* var. *kengiana* was based, had already been placed as a synonym of *A. hemsleyana* by Li (1952). The hairs on the petioles, branchlets, and midveins, and the serratures on leaf margins are not necessarily correlated with the ratio of length to width of the leaves.

14. *Actinidia latifolia* (Gardn. & Champ.) Merr. in Journ. Straits Branch Roy. Asiat. Soc. 86: 330. 1922.—*Heptaca? latifolia* Gardn. & Champ. in Hook. Journ. Bot. Kew. Gard. Misc. 1: 243. 1849. Type: China. Hong Kong (香港): *J. G. Champion s.n.* (holotype, n.v.).

A. guilinensis C. F. Liang in Guihaia 8 (2): 129. 1988, syn. nov. Type: China. Guangxi (广西): Guilin (桂林), 1987-05-21, *C. F. Liang* (梁畴芬) 34519 (holotype, IBK!).

阔叶猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Pinghe (平和), G. S. He (何国生) 1148; Jianyang (建阳), C. P. Tsien (简焯坡) 400227; Liancheng (连城), Y. Ling (林谔) 3790, 4027; Longyan (龙岩), Y. Ling (林谔) 4284; Nanjing (南靖), Xiamen Univ. Exped. (厦大采集队) 168, G. D. Ye (叶国栋) 1589; Nanping (南平), C. Ho (何景) 1925, G. S. He (何国生) 1663; Shanghang (上杭), L. K. Ling (林来官) 6992; Yongtai (永泰), Y. Lin (林英) 380. **Guangdong** (广东): Conghua (从化), L. Deng (邓良) 8820; Dapu (大埔), X. G. Li (李学根) 202576, W. T. Tsang (曾怀德) 21074, 21716, 21715; Dinghu (鼎湖), G. L. Shi (石国良) 13044; Enping (恩平), M. X. Huang (黄茂先) 110458; Fengkai (封开), C. Huang (黄成) 164106; Fengshun (丰顺), X. G. Li (李学根) 201050, 201340; Gaoyao (高要), C. Huang (黄成) 162629, Y. G. Liu (刘英光) 1917; Heyuan (河源), C. F. Wei (卫兆芬) 120777; Huaiji (怀集), Y. G. Liu (刘英光) 2512; Huiyang (惠阳), C. F. Wei (卫兆芬) 121612; Jiaoling (蕉岭), L. Deng (邓良) 4769; Lechang (乐昌), S. H. Chun (陈少卿) 1621, 1769, W. T. Tsang (曾怀

德) 20843; Liannan (连南), P. C. Tam (谭沛祥) 58931; Lianping (连平), C. F. Wei (卫兆芬) 120036; Lianshan (连山), P. C. Tam (谭沛祥) 58361, 57960; Lianzhou (连州), P. C. Tam (谭沛祥) 60003, 59829; Mei Xian (梅县), X. G. Li (李学根) 202441; Pingyuan (平远), X. G. Li (李学根) 202102; Renhua (仁化), L. Deng (邓良) 7676; Ruyuan (乳源), Anonymous 73-764, 73-0077, S. P. Ko (高锡朋) 53462; Shixing (始兴), L. Deng (邓良) 6677; Xinfeng (新丰), L. Deng (邓良) 8220; Xinxing (新兴), Y. G. Liu (刘英光) 2247, 2073; Xinyi (信宜), Z. Wang (黄志) 37740; Yangshan (阳山), L. Deng (邓良) 1115, 126, P. C. Tam (谭沛祥) 60306; Yingde (英德), T. M. Tsui 565; Zijin (紫金), C. F. Wei (卫兆芬) 120961. **Guangxi** (广西): Daxin (大新), H. N. Qin (覃海宁) 44, S. H. Chun (陈少卿) 12319; Fangcheng (防城), Anonymous 2817; Guigang (贵港), Z. Z. Chen (陈照宙) 50701; Heng Xian (横县), Z. Z. Chen (陈照宙) 50520; Lingui (临桂), Z. Z. Chen (陈照宙) 50977; Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 992, 723, 725; Longzhou (龙州), S. H. Chun (陈少卿) 11567, 11610; Luocheng (罗城), R. C. Ching (秦仁昌) 5709, 6003; Nanning (南宁), R. C. Ching (秦仁昌) 8178; Pingnan (平南), Z. Wang (黄志) 39336; Qinzhou (钦州), P. C. Zhou (周沛春) 80052; Rongshui (融水), Q. H. Lü (吕清华) 4589, S. H. Chun (陈少卿) 14300, 14097, 14483; Xing'an (兴安), Guangxi Exped. (广西队) 1220, 162, 2574. **Guizhou** (贵州): Fanjing Shan (梵净山), Anonymous 0199, N. Guizhou Exped. (黔北队) 1212; Jiangkou (江口), Sino-Amer. Guizhou Exped. (中美贵州队) 270, C. P. Tsien (简焯坡) 32363; Kaili (凯里), S. Guizhou Exped. (黔南队) 2264; Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 4003; Leishan (雷山), C. P. Tsien (简焯坡) 51092; Libo (荔波), Libo Exped. (荔波队) 81-6-0010; Pan Xian (盘县), Anshun Exped. (安顺队) 1006; Rongjiang (榕江), S. Guizhou Exped. (黔南队) 3005; Songtao (松桃), Sino-Amer. Guizhou Exped. (中美贵州队) 2360, N. Guizhou Exped. (黔北队) 1875; Xingren (兴仁), Guizhou Exped. (贵州队) 8780; Yinjiang (印江), C. P. Tsien (简焯坡) 30445, Sino-Amer. Guizhou Exped. (中美贵州队) 1662. **Hainan** (海南): Baisha (白沙), X. Q. Liu (刘心祈) 26298; Baoting (保亭), Diaoluoshan Exped. (吊罗山队) 2633, F. C. How (侯宽昭) 72701, 71995; Chengmai (澄迈), C. I. Lei 907, 619, W. T. Tsang (曾怀德) 723; Danzhou (儋州), W. T. Tsang (曾怀德) 239; Jianfeng Shan (尖峰山), K. S. Chow 78372, 79001, No.236-6 Exped. (236-6队) 4033; Lingshui (陵水), L. Deng (邓良) 2894; Ledong (乐东), X. Q. Liu (刘心祈) 26887; Sanya (三亚), X. R. Liang (梁向日) 62264; Wuzhi Shan (五指山), Tsang & Fung 291. **Hunan** (湖南): Cili (慈利), W. Hunan Exped. (湘西考察队) 730; Dong'an (东安), Y. Liu (刘瑛) 931; Dongkou (洞口), Anonymous 63069; Dao Xian (道县), P. C. Tam (谭沛祥) 61267; Heng Shan (衡山), C. J. Qi (祁承经) 13, L. H. Liu (刘林翰) 15872, Y. Q. Kuang (旷月秋) 1162, Y. Liu (刘瑛) 364, K. C. Kuan & B. M. Yang (关克俭, 杨保民) 208; Jianghua (江华), B. G. Li & S. B. Wan (李丙贵, 万绍斌) 5205, P. C. Tsoong (钟补勤) 1001; Qianyang (黔阳), Anjiang Agric. School (安江农校) 1113, 1446; Xinning (新宁), L. B. Luo (罗林波) 792, Y. B. Luo (罗毅波) 2879, 2826, Z. C. Luo (罗仲春) 218, 299, 847; Yizhang (宜章), H. S. Liao (廖衡松) 7704-1-116; Yongshun (永顺), L. H. Liu (刘林翰) 9415; Yunshan (云山), Y. F. Deng (邓云飞) 10315a; Without precise locality, P. C. Tam (谭沛祥) 62304, 62383, 62189, 61714. **Jiangxi** (江西): Anfu (安福), S. S. Lai (赖书绅) 1855; Anyuan (安远), C. M. Hu (胡启明) 2757, 2360; Dayu (大余), J. S. Yue (岳俊三) 1080, 1391; Ji'an (吉安), S. S. Lai (赖书绅) 734; Lianhua (莲花), S. S. Lai (赖书绅) 1388; Longnan (龙南), Anonymous 1285, J. Xiong (熊杰) 831; Ruijin (瑞金), C. M. Hu (胡启明) 4364; Suichuan (遂川), No. 236 Exped. (236任务组) 785; Taihe (泰和), S. S. Lai (赖书绅) 433; Xingguo (兴国), Inst. Bot. Exped. (植物所队) 367, 822; Xunwu (寻乌), C. M. Hu (胡启明) 1722; Yongxin (永新), S. S. Lai (赖书绅) 1044; Without precise locality, Z. B. Yang & J. Yao (杨志斌, 姚金) 1183. **Sichuan** (四川): Without precise locality, Science Institute of W. China (中国西部科学院) 4009. **Yunnan** (云南): Pingbian (屏边), P. I. Mao (毛品一) 2923, 2574, K. M. Feng (冯国楣) 4745.

Liang (1988) distinguished *A. guilinensis* from *A. latifolia* by its glabrous mature leaves, globose fruit, and 2 cm stipules. The fruit of *A. latifolia* is globose to stoutly cylindric. The leaves of *A. guilinensis* differ from those of *A. latifolia* in that they become glabrous when mature, but we do not think that this justifies specific divergence; in addition, the hairs on mature leaves of some specimens become more or less sparse at anthesis or at fruiting time.

15. *Actinidia fulvicoma* Hance in Journ. Bot. 23: 321. 1885. Type: China. Guangdong (广东): Luofu Shan (罗浮山), 1883-05, *B. C. Henry s.n.* (holotype, K!).

A. fulvicoma var. *lanata* (Hemsl.) C. F. Liang f. *arachnoidea* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 252. 1984, syn. nov. Type: China. Guangxi (广西): Longzhou (龙州),

between alt. 550–870 m, *S. H. Chun* (陈少卿) 11830 (holotype, IBK!).

A. fulvicoma var. *lanata* f. *hirsuta* (Finet & Gagnep.) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 252. 1984, syn. nov.—*A. fulvicoma* var. *hirsuta* Finet & Gagnep. in Bull. Soc. Bot. France 52: Mém. 4: 18. 1907 (Contr. Fl. As. Or.). Type: China. Guizhou (贵州): Without precise locality, *R. P. Bodinier* 2427 (isotype, K!).

黄毛猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Longyan (龙岩), D. S. Wang (王大顺) 1249; Luoyuan (罗源), Y. B. Luo (罗毅波) 3041, 3108; Nanjing (南靖), Xiamen Univ. Exped. (厦大采集队) 1197, 554. **Guangdong** (广东): Deqing (德庆), Y. G. Liu (刘英光) 956; Dinghu (鼎湖), G. L. Shi (石国良) 13057; Gao'an (高安), Y. G. Liu (刘英光) 1945, C. Huang (黄成) 162463; Gaozhou (高州), P. C. Zhou (周沛春) 80327; Gaoyao (高要), C. Huang (黄成) 162471; Heyuan (河源), C. F. Wei (卫兆芬) 120728; Jiaoling (蕉岭), L. Deng (邓良) 4770; Lianzhou (连州), P. C. Tam (谭沛祥) 59991; Ruyuan (乳源), Anonymous 315; Xinfeng (新丰), L. Deng (邓良) 7787; Xinyi (信宜), Z. Wang (黄志) 37866. **Guangxi** (广西): Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 1119, 721, 724, 395; Longzhou (龙州), S. H. Chun (陈少卿) 11830, 11581; Luocheng (罗城), R. C. Ching (秦仁昌) 6152, 5678, 5583; Rongshui (融水), Q. H. Lü (吕清华) 4436, 4301, S. H. Chun (陈少卿) 14069, 15650, 15885, 14073, 14822, 15769; Xing'an (兴安), G. Z. Li (李光照) 16612, 15049, 16577, 13938, Guangxi Exped. (广西队) 2435, 811, 2502, S. L. Yu (余少林) 90199; Xiangzhou (象州), Z. Wang (黄志) 39372. **Guizhou** (贵州): Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 3746; Leishan (雷山), C. P. Tsien (简焯坡) 50813; Rongjiang (榕江), S. Guizhou Exped. (黔南队) 2941, C. P. Tsien (简焯坡) 51460. **Hunan** (湖南): Leifeng Shan (雷锋山), Z. T. Li (李泽棠) 2583; Qianyang (黔阳), Anjiang Agric. School (安江农校) 1006; Wugang (武冈), L. H. Liu & G. Z. He (刘林翰, 何观州) 16140. **Jiangxi** (江西): Longnan (龙南), J. Xiong (熊杰) 1579, No. 236 Exped. (236任务组) 855; Quannan (全南), J. Xiong (熊杰) 679; Shangyou (上犹), Anonymous (70) 468. **Yunnan** (云南): Pingbian (屏边), C. W. Wang (王启无) 83077.

In *Actinidia fulvicoma*, the characteristics of the hairs on the petioles and branchlets are closely associated with each other, and accordingly, the species can be divided into two groups: one group has tomentose (occasionally velutinous) petioles and branchlets; the other has hirsute petioles and branchlets. The first group can be further divided into two subgroups: one, *A. fulvicoma* var. *pachyphylla* with coriaceous leaves, which are scabrous adaxially; the other, *A. fulvicoma* var. *fulvicoma* with chartaceous leaves, which are densely setose or strigose or only puberulous on the midvein adaxially. The second group is *A. hirsuta*.

Actinidia lanata was treated as a synonym of *A. eriantha* by Li (1952), following Rehder (1937). Earlier, Dunn (1911) in his key described *A. lanata* as “Rami novelli albo-tomentose,” the characteristic feature of *A. eriantha*. He cited Ford, n. 228 (Dunn, 1911), the type specimen of *A. lanata*, which proved that Rehder and Li were justified in combining the two named taxa. However, Liang (1984) treated *A. lanata* as a variety of *A. fulvicoma* and made the combination *A. fulvicoma* var. *lanata* (Hemsl.) C. F. Liang based on *A. lanata*. Obviously, the combination was erroneous and the name is relegated to synonymy in the present treatment.

16. *Actinidia chinensis* Planch. in London Journ. Bot. 6: 303. 1847. Type: China. Without precise locality, *R. Fortune* 39 (holotype, K!).

16a. *Actinidia chinensis* Planch. var. ***chinensis***

A. multipetaloides H. Z. Jiang in Journ. Southwest Agric. Univ. 17 (2): 93. 1995, syn. nov. Type: China. Yunnan (云南): Suijiang (绥江), 1989-06-10, S. S. Sun & H. Zhang (孙旭绍, 张颢) 89-3023 (holotype, YAA).

A. chinensis var. *rufopulpa* (C. F. Liang & R. H. Huang) C. F. Liang & A. R. Ferguson in Guihaia 5 (2): 72. 1985, syn. nov.—*A. chinensis* var. *chinensis* f. *rufopulpa* C. F. Liang & R. H. Huang in Acta Phytotax. Sin. 20: 101. 1982. Type: China. Hubei (湖北): Wufeng (五

峰), Chengguan (城关), Shawan (沙湾), alt. 1150 m, 1980-08-31, *R. H. Huang* (黄仁煌) 4016 (holotype, IBK!; isotype, HIB!).

A. chinensis var. *jinggangshanensis* (C. F. Liang) C. F. Liang & A. R. Ferguson in *Guihaia* 5 (2): 72. 1985, syn. nov. — *A. chinensis* var. *chinensis* f. *jinggangshanensis* C. F. Liang in *Acta Phytotax. Sin.* 20: 101. 1982. Type: China. Jiangxi (江西): Yongxin (永新), 1959-06-17, S. S. Lai (赖书绅) 928 (holotype, LBG!).

中华猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. **Anhui** (安徽): Huang Shan (黄山), E. China Work Station (华东工作站) 6373, J. S. Yue (岳俊三) 1775, M. Chen (陈谋) 1128, W. C. Cheng (郑万钧) 3977; Huoshan (霍山), Anhui Univ. Exped. (安大采集队) 51113, M. Liu (刘淼) A50085; Jinzhai (金寨), Anonymous 400, M. Liu (刘淼) A10067, E. China Work Station (华东工作站) 6850; Qimen (祁门), M. B. Deng (邓懋彬) 5046; She Xian (歙县), M. B. Deng (邓懋彬) 4692, 4697; Shucheng (舒城), Z. W. Xie (谢中稳) 97239; Yuexi (岳西), Anonymous 343, X. L. Liu (刘晓龙) 536. **Fujian** (福建): Taining (泰宁), L. K. Ling (林来官) 704; Wuyi Shan (武夷山), Z. G. Mao (毛宗国) 10534; Wuyishan Shi (武夷山市), M. K. Wang (王名金) 3434. **Guangdong** (广东): Lechang (乐昌), S. H. Chun (陈少卿) 3092; Ruyuan (乳源), S. P. Ko (高锡朋) 54097, 54154, 52589, 53070, Z. Wang (黄志) 43953. **Guangxi** (广西): Xing'an (兴安), G. Z. Li (李光照) 15190, Guangxi Exped. (广西队) 2479, 788. **Henan** (河南): Jigong Shan (鸡公山), Sino-Germ. Exped. (中德队) 336, 295, X. Q. Zhang (张祥卿) 20134, Wudai (吴戴) 191; Lushi (卢氏), K. M. Liu (刘继孟) 4950, Henan Exped. (河南队) 34052; Luanchuan (栾川), M. Liu (刘淼) H40058; Neixiang (内乡), Henan Exped. (河南队) 808; Shangcheng (商城), Anonymous 67; Song Xian (嵩县), Bot. Resource Exped. (植物资源考察队) 10220; Henan Exped. (河南队) 2428, 35034, Henan For. Depart. (河南省林业厅) 1265; Xixia (西峡), Henan Exped. 1095 (河南队) 1522; Xin Xian (新县), Henan Exped. (河南队) 8200; Without precise locality, Henan Exped. (河南队) 3049. **Hubei** (湖北): Yichang (宜昌), Z. D. Jiang (蒋祖德) 8, J. H. Zheng (郑洁华) 37. **Hunan** (湖南): Baojing (保靖), Anonymous 1947; Chengbu (城步), P. C. Tam (谭沛祥) 63851; Heng Shan (衡山), B. H. Liang (梁宝汉) 84979, S. H. Chun (陈少卿) 3230; Lingling (零陵), S. H. Chun (陈少卿) 446; Pingjiang (平江), Z. C. Luo (罗仲春) 693; Qidong (祁东), J. D. Li (李际东) 554, 204; Qianyang (黔阳), Anonymous 2101, 1913, Anjiang Agric. School (安江农校) 117, 1453; Xinning (新宁), Ziyunshan Exped. (紫云山队) 481. **Jiangxi** (江西): Anfu (安福), S. S. Lai (赖书绅) 1916; Dong Xiang (东乡), X. H. Li (李馨和) 1494; Fuliang (浮梁), X. H. Li (李馨和) 569; Guangchang (广昌), C. M. Hu (胡启明) 5221; Ji'an (吉安), Anonymous (70) 094; Jinggang Shan (井冈山), J. S. Yue (岳俊三) 4853; Lefeng (乐丰), X. H. Li (李馨和) 1328; Lichuan (黎川), M. X. Nie (聂敏祥) 3022; S. J. Shen (沈绍金) 501; Lu Shan (庐山), M. X. Nie (聂敏祥) 7157; Nanfeng (南丰), X. X. Yang (杨祥学) 65048; Pingxiang (萍乡), Jiangxi Exped. (江西队) 2841; Qianshan (铅山), Y. D. Chen (陈耀东) 1048, C. P. Tsien (简焯坡) 401383, M. X. Nie (聂敏祥) 4355, 4090; Shicheng (石城), C. M. Hu (胡启明) 4908; Suichuan (遂川), No. 236 Exped. (236任务组) 693; Wuning (武宁), S. S. Lai (赖书绅) 2411; Wuyuan (婺源), X. H. Li (李馨和) 304, 161; Xingguo (兴国), Inst. Bot. Exped. (植物所队) 547, 112; Xinjian (新建), X. X. Yang (杨祥学) 10431; Yifeng (宜丰), S. S. Lai (赖书绅) 296; Yongxiu (永修), S. S. Lai (赖书绅) 2064; Ziyuan (资源), X. H. Li (李馨和) 377. **Shaanxi** (陕西): Shanyang (山阳), J. X. Yang (杨金祥) 2566; Yang Xian (洋县), K. M. Liu (刘继孟) 8423. **Zhejiang** (浙江): Chun'an (淳安), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 27431, 27842; Hangzhou (杭州), Anonymous 509, 2129, S. Y. Chang (章绍尧) 2402, 700, 2096; Ji'an (吉安), X. Y. Ho (贺贤育) 24287; Jiande (建德), Anonymous 29303, S. X. Qian (钱三新) L8523251, J. Zhao (赵坚) 8524245; Jianqian Shan (尖千山), C. P. Tsien (简焯坡) 61167; Jingning (景宁), S. Y. Chang (章绍尧) 5129, 4897; Kaihua (开化), Anonymous 29685, Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 26094, G. R. Chen (陈根容) 2528; Lishui (丽水), S. Y. Chang (章绍尧) 6238, 6330, K. K. Tsoong (钟观光) 724; Lin'an (临安), Anonymous 28934, 29707, 29208, 28507, 30695, 28691, 83-2-006, L8335118, X. Y. Ho (贺贤育) 22760, 26702, 29816, M. B. Deng (邓懋彬) 4384, 4728; X. Li (李新) J811-2-170, X. L. Zhou (周世良) 2000617-2; Longquan (龙泉), S. Y. Chang (章绍尧) 5037, 4444, 3250, 3086, 2797, 6898, 3220, 17266, 4448, 4136; Ningbo (宁波), Hangzhou Bot. Gard. (杭州植物园) 1174; Qingyuan (庆元), S. Y. Chang (章绍尧) 3509; Rui'an (瑞安) S. Y. Chang (章绍尧) 5490;

Shouchang (寿昌), Anonymous 29501; Suichang (遂昌), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 25644, 26428, J. X. Wang (王景祥) 2008; Taishun (泰顺), S. Y. Chang (章绍尧) 3761, 3764, 5513, 3721; Tianmu Shan (天目山), Anonymous 31190, X. Y. Ho (贺贤育) 21509, 21929, 21381, 22108, 21817, 21897, 21949, 22200, 21566, 21900, P. J. Tsoong 114, 229; Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 29289, M. B. Deng (邓懋彬) 4078-1, 3841, 1080, Q. X. Zheng (郑求星) S815-128; Tiantai Shan (天台山), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 28274, X. Y. Ho (贺贤育) 28225; Wuyi Shan (武夷山), Z. G. Mao (毛宗国) 10544; Yingchuan (英川), S. Y. Chang (章绍尧) 4868; Zhuji (诸暨), X. Li (李新) J8212138.

The type specimen of *A. multipetaloides* H. Z. Jiang could not be found despite our best efforts, but based on the original description, this is actually *A. chinensis* var. *chinensis*, which occasionally has a second whorl of petals.

Actinidia chinensis var. *jinggangshanensis* and *A. chinensis* var. *rufopulpa* were based on *A. chinensis* var. *chinensis* f. *jinggangshanensis* and *A. chinensis* var. *chinensis* f. *rufopulpa*, respectively (Liang & Ferguson, 1985), when *A. chinensis* var. *hispida* (see below) was elevated in its rank to *A. deliciosa*. Since *A. chinensis* var. *hispida* is maintained as a variety of *A. chinensis*, they should be reduced in rank as forms as before, and are treated as synonyms in the present treatment.

16b. *Actinidia chinensis* Planch. var. *deliciosa* A. Chev. in Rev. Bot. App. Agric. Trop. 21: 241, pl. II. 1941. Type: not designated.

Actinidia deliciosa (A. Chev.) C. F. Liang & A. R. Ferguson in Guihaia 4 (3): 181. 1984, syn. nov. — *A. latifolia* Merr. var. *deliciosa* A. Chev. in Rev. Bot. App. Agric. Trop. 20: 12, pls. I, II. 1940. Type: not designated.

A. deliciosa var. *coloris* T. H. Lin & X. Y. Xiong in Guihaia 11 (2): 117. 1991, syn. nov. Type: China. Hunan (湖南): Shimen (石门), in shrubs, alt. 1200 m, 1990-10-03, X. Y. Xiong (熊兴耀) 001 (holotype, IBK!).

A. deliciosa var. *longipila* (Liang & Wang) C. F. Liang & A. R. Ferguson in Guihaia 4 (3): 182. 1984, syn. nov. — *A. chinensis* var. *hispida* C. F. Liang f. *longipila* C. F. Liang & R. Z. Wang in Acta Phytotax. Sin. 20: 102. 1982. Type: China. Shaanxi (陕西): Mei Xian (眉县), X. M. Zhang (张襄明) 707 (holotype, IBK!).

A. deliciosa var. *chlorocarpa* (C. F. Liang) C. F. Liang & A. R. Ferguson in Guihaia 4 (3): 182. 1984, syn. nov. — *A. chinensis* var. *hispida* f. *chlorocarpa* C. F. Liang in Guihaia 2 (1): 4. 1982. Type: China. Yunnan (云南): Huize (会泽), 1981-09, Z. Y. Yang & F. C. Tang (杨志远, 唐发才) 1033 (Holotype, IBK!).

美味猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), T. L. Dai (戴天伦) 104318, 105904, P. Y. Li (李培元) 4143, 5257; Fengjie (奉节), H. F. Zhou (周洪富) 109095, H. F. Zhou & H. Y. Su (周洪富, 粟和毅) 108445, 108141, T. Y. Chang (张泽荣) 25201; Hechuan (合川), X. L. Sun (孙祥麟) 5419; Nanchuan (南川), C. H. Chu (曲仲湘) 1374, W. P. Fang (方文培) 1084, 1096, Jinfoshan Exped. (金佛山队) 1724, 881, J. H. Xiong (熊济华) 91259, J. H. Xiong & Z. L. Zhou (熊济华, 周子林) 91609, 92399, K. C. Kuan et al. (关克俭等) 1221, 2067, G. F. Li (李国凤) 60775, 61855, 62271, 63301, 62379, C. H. Chu (曲仲湘) 938, F. T. Wang (汪发纘) 10125, 10518, S. C. Chen & K. Y. Liang (陈心启, 郎楷永) 2316, Science Institute of W. China (中国西部科学院) 32224; Wanyuan (万源), P. Y. Li (李培元) 6205; Wu Shan (巫山), T. P. Wang (王作宾) 10707, G. H. Yang (杨光辉) 59850; Wuxi (巫溪), G. H. Yang (杨光辉) 58580, 58488, 59655; Youyang (酉阳), SW Norm. Univ. Biol. Depart. (西南师范大学生物系) 2356. **Gansu** (甘肃): Kang Xian (康县), Z. Y. Zhang (张志英) 17100; Tianshui (天水), G. H. Wang (王国宏) 93015, K. M. Liu (刘继孟) 10304; Wen Xian (文县), X. Wang (王新) 121, X. L. Chen (陈学琳) 910953, Z. Y. Zhang (张志英) 14390. **Guizhou** (贵州): Anlong (安龙), Guizhou Exped. (贵州队) 5573, 4386, 4822, 2836, Bijie Exped. (毕节队) 2836; Bijie (毕节),

P. H. Yu (禹平华) 365; Dejiang (德江), P. C. Tsoong (钟补勤) 666; Anshun (安顺), P. C. Tsoong (钟补勤) 1276; Kaili (凯里), S. Guizhou Exped. (黔南队) 1170, 1783, 581, 3481, 2098, 3926; Jiangkou (江口), Sino-Amer. Guizhou Exped. (中美贵州队) 525; Leishan (雷山), S. Guizhou Exped. (黔南队) 891, 956, C. P. Tsien (简焯坡) 50033, 50070, 51117; Songtao (松桃), N. Guizhou Exped. (黔北队) 547; Nayong (纳雍), Bijie Exped. (毕节队) 293; Renhuai (仁怀), P. C. Tsoong (钟补勤) 50; Rongjiang (榕江), S. Guizhou Exped. (黔南队) 3135; Shiqian (石阡), S. Guizhou Exped. (黔南队) 2613; Songtao (松桃), N. Guizhou Exped. (黔北队) 1374, 1882; Weining (威宁), Bijie Exped. (毕节队) 271; Weng'an (瓮安), Libo Exped. (荔波队) 2304; Xingren (兴仁), C. Z. Dong & P. Dong (党成忠, 党平) 304, Guizhou Exped. (贵州队) 8687, 7432; Xingyi (兴义), Anshui Exped. (安顺队) 808; Yanhe (沿河), N. Guizhou Exped. (黔北队) 2315; Yinjiang (印江), C. P. Tsien (简焯坡) 30497, 30365, 32222, Sino-Amer. Guizhou Bot. Exped. (中美贵州植考队) 1404, N. Guizhou Exped. (黔北队) 767, 650; Zhenfeng (贞丰), Beijing Youth Exped. (北京青年队) 339; Zunyi (遵义), Sichuan-Guizhou Exped. (川黔队) 1276. **Hubei** (湖北): Badong (巴东), Q. L. Chen (陈权龙) 1802, Z. S. Zhang (张志松) 736, 766, T. P. Wang (王作宾) 11102, Hubei Bot. Exped. (鄂植考队) 24604, H. C. Chow (周鹤昌) 750; Enshi (恩施), G. X. Fu & Z. S. Zhang (傅国勋, 张志松) 1377, H. F. Zhou (周洪富) 108041; Fang Xian (房县), K. M. Liu (刘继孟) 9232; Hefeng (鹤峰), F. S. Peng (彭辅松) 779, 273, H. J. Li (李洪钧) 5668, 6175; Jianshi (建始), W. B. Lin (林文豹) 121, T. L. Dai (戴天伦) 214, L. Y. Dai & Z. H. Qian (戴伦膺, 钱重海) 370, 1008; Laifeng (来凤), H. J. Li (李洪钧) 7649; Lichuan (利川), W. B. Lin (林文豹) 279, L. Y. Dai & Z. H. Qian (戴伦膺, 钱重海) 1008; Shennongjia (神农架), No. 236-6 Exped. (236-6队) 2170; Xianfeng (咸丰), 李洪钧9226; Kingshan (兴山), H. J. Li (李洪钧) 204, Z. D. Chen (陈之端) 961334, Y. Liu (刘瑛) 136; Xuan'en (宣恩), H. J. Li (李洪钧) 3156, 2576, 3550, 4040; Zhuxi (竹溪), K. M. Liu (刘继孟) 8619, 8680. **Hunan** (湖南): Cili (慈利), W. Hunan Exped. (湘西考察队) 329; Dong'an (东安), Z. C. Luo (罗仲春) 292, 195; Heng Shan (衡山), Y. Liu (刘瑛) 221; Longshan (龙山), L. H. Liu (刘林翰) 1796; Sangzhi (桑植), B. G. Li (李丙贵) 750111; Yongshun (永顺), W. Hunan Exped. (湘西队) 47; Ziyun Shan (紫云山), L. H. Liu (刘林翰) 15259. **Jiangxi** (江西): Anfu (安福), J. S. Yue (岳俊三) 3213; Lianhua (莲花), Anonymous 651219; Ninggang (宁冈), S. S. Lai (赖书绅) 728; Xinjian (新建), X. X. Yang (杨祥学) 10479. **Shaanxi** (陕西): Foping (佛坪), K. J. Fu (傅坤俊) 4928; Hu Xian (户县), P. C. Kuo (郭本兆) 170; Ningshan (宁陕), J. Q. Xing (邢吉庆) 1695, Pingli (平利), Y. L. Qiao (乔英林) 1160, P. Y. Li (李培元) 1459; Shanyang (山阳), J. X. Yang (杨金祥) 2947; Taibai Shan (太白山), F. T. Wang (汪发缵) 391, T. P. Wang (王作宾) 1366. **Sichuan** (四川): Baoxing (宝兴), K. C. Kuan & W. T. Wang (关克俭, 王文采) 2735, 2360, S. S. Chang & Y. X. Ren (张秀实, 任有铎) 4777, 5043, T. P. Soong (宋滋圃) 39156, Z. B. Cheng (程子白) 115781; Dujiangyan (都江堰), H. Zhu (何铸) 12199; Cangxi (苍溪), Anonymous 2521, Ebian (峨边), Z. T. Guan (管中天) 6643; Emei Shan (峨眉山), W. P. Fang (方文培) 2613, J. H. Xiong et al. (熊济华等) 30791, G. H. Yang (杨光辉) 54757, 55620, 55479, 57119, R. K. Zhao (赵汝垠) 82; Ganluo (甘洛), S. Jiang (姜恕) 7706; Jinyang (金阳), Z. L. Wang (王仲良) 14772; Junlian (筠连), Sichuan Econ. Pl. Exped. (川经队) 0318, 57; Kangding (康定), Z. P. Huang (黄治平) 1928, W. C. Chang 1728; Leibo (雷波), Sichuan Econ. Pl. Exped. (川经队) 227, Z. T. Guan (管中天) 8930; Mabian (马边), F. T. Wang (汪发缵) 22859, T. H. Tu (杜大华) 5599, X. L. Sun (孙祥麟) 5599; Motianling (摩天岭), F. T. Wang (汪发缵) 22445; Pingshan (屏山), Anonymous 1161, T. T. Yu (俞德浚) 3054, T. H. Tu (杜大华) 5419; Pingwu (平武), Anonymous 10397, 10127, X. L. Jiang (蒋兴麟) 10504, 11069, 10409, 11154; Shimian (石棉), C. J. Xie (谢朝俊) 41043, 40997, 40543, 40610, 40880, 40651, 42806, 42611, 40626, 41534, 41716; Songpan (松潘), T. T. Yu (俞德浚) 2568, Songpan Exped. (松潘小组) 1713; Tianquan (天全), X. L. Jiang (蒋兴麟) 34944, Nanshuibeidiao Exped. (南水北调队) 9976, T. Naito et al. 70, Sichuan Econ. Pl. Exped. (川经队) 346, T. S. Ying (应俊生) 9976, K. C. Kuan (关克俭) 2360, T. T. Yu (俞德浚) 1852, S. Jiang & T. L. Chin (姜恕, 金存礼) 1780; Wenchuan (汶川), Anonymous 8377. **Yunnan** (云南): Malong (马龙), Y. H. Li (李延辉) 232; Suijiang (绥江), B. S. Sun (孙毕兴) 133; Yongshan (永善), H. T. Tsai (蔡希陶) 51180.

Actinidia chinensis var. *hispida* and var. *setosa* were raised in their rank to *A. deliciosa* and *A. setosa*, respectively (Liang & Ferguson, 1984, 1985), but they are closely related as shown in molecular phylogenetic studies. Recent divergence and high levels of species interfertility provide considerable support for a species complex hypothesis for *A. deliciosa* and *A. chinensis* (Li et al., 2002; Chat et al., 2004). Hence, we restore the varietal status of *A.*

chinensis var. *deliciosa*.

As Liang (1984) noticed, *Actinidia chinensis* var. *deliciosa* was published earlier than *A. chinensis* var. *hispida*. Accordingly, the former name should be chosen based on the rule of priority.

Actinidia deliciosa var. *chlorocarpa* and *A. deliciosa* var. *longipila* were based on *A. chinensis* var. *hispida* f. *chlorocarpa* and *A. chinensis* var. *hispida* f. *longipila*, respectively (Liang & Ferguson, 1984), when *A. chinensis* var. *hispida* was elevated to the rank of *A. deliciosa*. Since presently the name *A. chinensis* var. *deliciosa* is retained, they should be relegated to forms as before, and treated here as synonyms. Similarly, *A. deliciosa* var. *coloris* should also be treated as a form and placed in synonymy.

16c. *Actinidia chinensis* var. *setosa* H. L. Li in Journ. Arn. Arb. 33: 56. 1952. Type: China. Taiwan (台湾): Mt. Ali Shan (阿里山), *E. H. Wilson 10802* (holotype, US!; isotype, A).

A. setosa (H. L. Li) C. F. Liang & A. R. Ferguson in Guihaia 5 (2): 72. 1985, syn. nov.

刺毛猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Taiwan (台湾): Nantou (南投), H. L. Li (李惠林) s.n.; Taizhong (台中), J. G. Liu (刘景国) 996.

Many specimens originated from the mainland of China have leaves that are soft-setose adaxially, while the setose hairs on the petioles and branchlets are shorter than those of typical *A. chinensis* var. *setosa* from Taiwan. These represent transitional forms between *A. chinensis* var. *deliciosa* and *A. chinensis* var. *setosa*. Consequently, it is not appropriate to raise the status of *A. chinensis* var. *setosa* to a distinct entity.

17. *Actinidia eriantha* Benth. in Journ. Linn. Soc. Bot. 5: 55. 1861. Type: China. Fujian (福建): *Lindley 1836* (holotype, K).

A. fulvicoma Hance var. *lanata* (Hemsl.) C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 252. 1984, syn. nov. — *A. lanata* Hemsl. in Ann. Bot. 9: 146. 1895. Type: China. Guangdong (广东): Without precise locality, *Mr. Ford's native collector; 228 of 1890 collection* (holotype, K).

A. eriantha f. *alba* C. F. Gan in Guihaia 3 (1): 18. 1983, syn. nov. Type: China. Zhejiang (浙江): Qingyuan (清原), 1982-05-22, C. F. Gan (甘长飞) 101 (holotype, IBK!).

A. eriantha var. *calvescens* C. F. Liang in Guihaia 11 (2): 118. 1991, syn. nov. Type: China. Guangxi (广西): Guilin (桂林), 1987-05-09, C. F. Liang (梁畴芬) 34511 (holotype, IBK!).

A. eriantha var. *brunnea* C. F. Liang in Guihaia 11 (2): 118. 1991, syn. nov. Type: China. Guangxi (广西): Guilin (桂林), 1987-05-15, C. F. Liang (梁畴芬) 34514 (holotype, IBK!).

毛花猕猴桃

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Changting (长汀), Anonymous 838, Y. Ling (林谿) 4915; Gutian (古田), C. F. Yang (杨赐福) 361; Jianning (建宁), Z. Y. Li (李振宇) 84-61; Jianyang (建阳), C. P. Tsien (简焯坡) 400205, 40091; Liancheng (连城), Y. Ling (林谿) 3483, 3583, 3825; Longyan (龙岩), D. S. Wang (王大顺) 1135; Nanjing (南靖), Xiamen Univ. Exped. (厦大采集队) 274; Nanping (南平), Z. Y. Li (李振宇) 11216, C. M. Tam (谭策铭) 971481, G. S. He (何国生) 805; Sanyuan (三元), L. K. Ling (林来官) 236; Sha Xian (沙县), Y. Lin (林英) 673, 195; Shunchang (顺昌), M. S. Li & Z. Y. Li (李明生, 李振宇) 4251; Taining (泰宁), J. R. Chen (陈家瑞) 43; Wuyishan Shi (武夷山市), Anonymous 236-914, 236-617, P. S. Chiu (裘佩喜) 1668, Wuyishan Exped. (武夷山队) 12, C. P. Tsien (简焯坡) 400773, M. Suzuki 98121; Xiamen (厦门), Xiamen Univ. Exped. (厦大采集队) 1294; Yanping (延平), Q. H. Chang (张钦贺) 3283. **Guangdong** (广东): Heyuan (河源), C. F. Wei (卫兆芬) 120685; Jiaoling (蕉岭), L. Deng (邓良) 4552, 4843; Lechang (乐昌), S. H. Chun (陈少卿) 1704, N. Q. Chen (陈念劬) 42904; Liannan (连南), P. C. Tam (谭沛祥) 59197;

Lianping (连平), Y. G. Liu (刘英光) 134; Lianshan (连山), P. C. Tam (谭沛祥) 58315; Longchuan (龙川), J. L. Zuo (左景烈) 21652; Mei Xian (梅县), W. T. Tsang (曾怀德) 21384; Pingyuan (平远), L. Deng (邓良) 4177, 4438, X. G. Li (李学根) 202000; Raoping (饶平), X. G. Li (李学根) 200573; Ruyuan (乳源), L. Deng (邓良) 5706, X. Q. Liu (刘心祈) 28960, S. P. Ko (高锡朋) 52882; Wengyuan (翁源), X. Q. Liu (刘心祈) 24232, 25206; Yang Shan (阳山), L. Deng (邓良) 254. **Guangxi** (广西): Longsheng (龙胜), Guangfu For. Exped. (广福林区采集队) 263; Luocheng (罗城), R. C. Ching (秦仁昌) 6132; Rongshui (融水), S. H. Chun (陈少卿) 16292, Q. H. Lü (吕清华) 3644; Xing'an (兴安), Guangxi Exped. (广西队) 2482, 4182, S. L. Yu (余少林) 900078. **Guizhou** (贵州): Kaili (凯里), S. Guizhou Exped. (黔南队) 1603, 1166, 1439; Leigong Shan (雷公山), S. Guizhou Exped. (黔南队) 3744; Leishan (雷山), C. P. Tsien (简焯坡) 50076, 5007; Rongjiang (榕江), S. Guizhou Exped. (黔南队) 2872. **Hunan** (湖南): Dong'an (东安), P. C. Tsoong (钟补勤) 1068, Y. Liu (刘瑛) 888; Qianyang (黔阳), Anjiang Agric. School (安江农校) 1417, 1107, 457; Rugui (汝桂), Anonymous 8516; Xinning (新宁), Ziyunshan Exped. (紫云山队) 537, 724, 1561, Y. B. Luo (罗毅波) 791; Xuefeng Shan (雪峰山), Z. T. Li (李泽棠) 2139, 2622; Yizhang (宜章), H. S. Liao (廖衡松) 7704-1-056, S. H. Chun (陈少卿) 2128. **Jiangxi** (江西): Anfu (安福), S. S. Lai (赖书绅) 1764, J. S. Yue (岳俊三) 3040; Dayu (大余), J. S. Yue (岳俊三) 1505; Gan Xian (赣县), Z. B. Yang & J. Yao (杨志斌, 姚金) 1150; Guangfeng (广丰), M. X. Nie (聂敏祥) 6057; Huichang (会昌), C. M. Hu (胡启明) 3090; Ji'an (吉安), Anonymous (70) 264, (70) 230, S. S. Lai (赖书绅) 864, 647; Jinggang Shan (井冈山), Anonymous (70) 175, J. Xiong (熊杰) 2915, J. S. Yue (岳俊三) 5059, Jiangxi Exped. (江西队) 896; Lianhua (莲花), S. S. Lai (赖书绅) 1326; Lichuan (黎川), S. S. Lai (赖书绅) 2683, M. K. Wang (王金名) 2096; Longnan (龙南), No. 236 Exped. (236任务组) 1238; Lu Shan (庐山), Anonymous 4; Nanping (南平), Anonymous 650232, M. X. Nie & S. S. Lai (聂敏祥, 赖书绅) 2240; Ningdu (宁都), C. M. Hu (胡启明) 5607; Pingxiang (萍乡), Jiangxi Exped. (江西队) 2654, 43; Qianshan (铅山), M. X. Nie (聂敏祥) 4446, Y. D. Chen & X. T. Ma (陈耀东, 马欣堂) 1110; Ruijin (瑞金), C. M. Hu (胡启明) 4304; Shangyou (上犹), Jiangxi Exped. (江西队) 1105, 356; Shicheng (石城), C. M. Hu (胡启明) 4478; Suichuan (遂川), J. S. Yue (岳俊三) 4560, 4285, No. 236 Exped. (236任务组) 640, 658, 475; Taihe (泰和), S. S. Lai (赖书绅) 501; Wugong Shan (武功山), Jiangxi Exped. (江西队) 520, 1715; Xingguo (兴国), Inst. Bot. Exped. (植物所队) 48, 377, 412; Xunwu (寻乌), Anonymous 1056, J. S. Yue (岳俊三) 1856, S. S. Lai (赖书绅) 933, C. M. Hu (胡启明) 1223; Yihuang (宜黄), Q. H. Li & Z. Chen (李启和, 陈箴) 1630. **Zhejiang** (浙江): Jiangshan (江山), J. X. Wang (王景祥) s.n.; Jingning (景宁), S. Y. Chang (章绍尧) 5212; Longquan (龙泉), Anonymous 8717, S. Y. Chang (章绍尧) 4127, 2734, 6983, 6766, 7265, J. X. Wang (王景祥) 1620, R. H. Shan (单人骅) 5403, Z. Z. Wang (黄正章) 285; Lishui (丽水), S. Y. Chang (章绍尧) 6337; Qingyuan (庆元), S. Y. Chang (章绍尧) 3393; Rui'an (瑞安), S. Y. Chang (章绍尧) 6535; Suichang (遂昌), Zhejiang Pl. Resour. Exped. (浙江植物资源普查队) 25957, 26378; Tianshun (泰顺), S. Y. Chang (章绍尧) 4993, 3842; Wuyan (乌岩), S. Y. Chang (章绍尧) 5663; Yingchuan (英川), S. Y. Chang (章绍尧) 4921.

As discussed above, *Actinidia lanata* is a synonym of *A. eriantha* (Li, 1952), but Liang (1984) regarded it as a variety of *A. fulvicoma*. Therefore, in the present treatment it is reduced to a synonym.

Since the flower color of plants of *Actinidia* often shows variation to some extent, there is no justification to establish new taxonomic units based on such a variable criterion. Furthermore, the characters that distinguish *A. eriantha* var. *calvescens* and var. *brunnea* from the typical form do not appear to be correlated with other characters or geographic distribution. They are only morphological variants.

18. *Actinidia sorbifolia* C. F. Liang in Fl. Reip. Pop. Sin. 49 (2): 324. 1984. Type: China. Guizhou (贵州): Yinjiang (印江), in dense forest, 1963-08-22, C. P. Tsien et al. (简焯坡等) 31065 (holotype, PE!).

A. truncatifolia C. Y. Chang & P. S. Liu in Bull. Bot. Res., Harbin 4 (2): 147. 1984. Type: China. Sichuan (四川): Qianwei (犍为), Shuangxi (双溪), along a river, alt. 830 m, 1982-05-13, J. Y. Zhang (张俊英) 82-2 (holotype, SR).

Specimens examined (if not designated, specimens are deposited in PE):

China. Guizhou (贵州): Anlong (安龙), Guizhou Exped. (贵州队) 4982; Leishan (雷山), Y. Z. Ren (任永智) 2 (IBK), D. Z. Pan (潘斗忠) 4 (IBK). **Hunan** (湖南): Chengbu (城步), T. R. Cao (曹铁如) 34 (IBK).

This species is characterized by thinly coriaceous leaves with raised and distinct midveins and lateral veins abaxially, and glabrous, lenticellate, subglobose fruit. The leaves vary considerably in shape, being truncate to rounded at the apex, sometimes mucronate. By comparing the protologue and photograph of the putative new species, *A. truncatifolia*, we found it to be conspecific with *A. sorbifolia*.

19. Actinidia zhejiangensis C. F. Liang in Guihaia 2 (1): 2. 1982. Type: China. Zhejiang (浙江): Qingyuan (清原), 1981-10, C. F. Gan (甘长飞) 3 (holotype, IBK!).

A. persicina R. H. Huang & S. M. Wang in Journ. Wuhan Bot. Res. 13: 113. 1995, syn. nov. Type: China. Zhejiang (浙江): Jianning (建宁), 1991-05-24, R. H. Huang (黄仁煌) 9113 (holotype, HIB!).

Actinidia persicina is very similar to *A. zhejiangensis*. The only slight difference between them is that the hairs on the leaves in *A. zhejiangensis* are caducous when mature, and the inflorescences are 1-flowered, while those of *A. persicina* are 1–3-flowered. However, overall they are similar and should be treated as conspecific.

20. Clematoclethra scandens (Franch.) Maxim. in Trudy Imp. S.-Peterburgsk. Bot. Sada 11: 38. 1890.

20a. Clematoclethra scandens ssp. scandens—*Clethra scandens* Franch. in Nouv. Arch. Mus. Hist. Nat. Paris ser. 2. 10: 53, t. 10 (Pl. David. 2: 91 t. 10. 1888). 1887. Type: China. Sichuan (四川): Baoxing (宝兴), A. David s.n.

Clematoclethra leiboensis C. F. Liang & Y. C. Chen ex C. Y. Chang in Fl. Sichuan. 4: 67. 1988, syn. nov. Type: China. Sichuan (四川): Leibo (雷波), T. T. Yu (俞德浚) 3288 (holotype, PE!).

刚毛藤山柳

Specimens examined (if not designated, specimens are deposited in PE).

China. Chongqing (重庆): Nanchuan (南川), Jinfoshan Exped. (金佛山考察队) 2107, K. C. Kuan (关克俭) 1364, J. H. Xiong & Z. L. Zhou (熊济华, 周子林) 92774, G. F. Li (李国凤) 61950. **Gansu** (甘肃): Cheng Xian (成县), T. P. Wang (王作宾) 15053. Hui Xian (徽县): T. P. Wang (王作宾) 15107; Kang Xian (康县), Y. S. Lian (廉永善) 96350, Z. Y. Zhang (张志英) 16290; Tianshui (天水), Q. X. Li (李全喜) 983; Wen Xian (文县), X. L. Chen (陈学林) 911858; Wudu (武都), Z. Y. Zhang (张志英) 5920. **Guizhou** (贵州): Bijie (毕节), P. H. Yu (禹平华) 631; Fanjing Shan (梵净山), Science Inst. W. China (中国西部科学院) 3675. **Hunan** (湖南): Xinning (新宁), Y. B. Luo (罗毅波) 3016, 2555. **Sichuan** (四川): Ebian (峨边), Z. T. Guang (管中天) 6526, G. H. Yang (杨光辉) 56297; Emei Shan (峨眉山), K. C. Kuan (关克俭) 1524, 1616, G. H. Yang (杨光辉) 56297, 55524, 55457, W. P. Fang (方文培) 6587, W. P. Fang et al. (方文培等) 20499, 20724, T. N. Liou (刘慎涛) 10551; Ganluo (甘洛), Sichuan Econ. Pl. Exped. (川经队) 3980; Hanyuan (汉源), Q. S. Zhao (赵清盛) 325, T. P. Wang (王作宾) 8844; Hongya (洪雅), C. W. Yao (姚仲吾) 2301; Kangding (康定), Z. S. Liu (刘振书) 797; Leibo (雷波), T. T. Yu (俞德浚) 3952, 3428, 3985, 3288, Z. T. Guang (管中天) 6770; Meigu (美姑), Anonymous 13614, Z. T. Guang (管中天) 9071; Shimian (石棉), C. J. Xie (谢朝俊) 11224, 41959, 42659, 4226; Tianquan (天全), K. C. Kuan & W. T. Wang (关克俭, 王文采) 3204, Sichuan Econ. Pl. Exped. (川经队) 3980, 589, X. L. Jiang (蒋兴麀) 35225, Nanshuibeidiao Exped. (南水北调队) 1838, K. C. Kuan (关克俭) 3204, W. H. Hu & Z. He (胡文晃, 何铸) 10208, X. L. Jiang & J. H. Xiong (蒋兴麟, 熊济华) 34625, Jinfoshan Exped. (金佛山考察队) 2101; Xingjing (荣经), Q. S. Zhao (赵清盛) 383, 1533; Yuxi (越西), Sichuan Econ. Pl. Exped. (川经队) 3838, T. T. Yu (俞德浚) 1013. **Yunnan** (云南): Daguan (大关), B. S. Sun (孙必兴) 804, 805, NE Yunnan Exped. (滇东北队) 134; Yiliang (彝良), NE Yunnan Exped. (滇东北队) 681.

According to the taxonomic scheme of Tang and Xiang (1989), diverse types of hairs on the plants of *Clematoclethra* have no merit as basis for specific separation. Consequently, the

original description of *C. leiboensis* agrees well with that of *C. scandens* ssp. *scandens*.

20b. *Clematoclethra scandens* ssp. *actinidioides* (Maxim.) Y. C. Tang & Q. Y. Xiang in Acta Phytotax. Sin. 27: 91. 1989.—*Clematoclethra actinidioides* Maxim. in Acta Hort. Petrop. 11: 38. 1889. Type: China. Gansu (甘肃): Without precise locality, *G. N. Potanin s.n.* (isotype, PE!).

C. lasioclada Maxim. var. *oblonga* C. F. Liang & Y. C. Chen ex C. Y. Chang in Fl. Sichuan. 4: 82. 1988, syn. nov. Type: China. Chongqing (重庆): Nanchuan (南川), *G. F. Li* (李国凤) 62699 (holotype, SZ; isotype, PE!).

猕猴桃藤山柳

Specimens examined (if not designated, specimens are deposited in PE):

China. Chongqing (重庆): Chengkou (城口), T. L. Dai (戴天伦) 101386; Nanchuan (南川), Jinfoshan Exped. (金佛山考察队) 1651, *G. F. Li* (李国凤) 63304, K. C. Kuan (关克俭) 1068, J. H. Xiong & Z. L. Zhou (熊济华, 周子林) 92584, 91323; Wuxi (巫溪), G. H. Yang (杨光辉) 58865. **Gansu** (甘肃): Dangchang (宕昌), T. P. Wang (王作宾) 14588, Y. M. Yuan (袁永明) 1038; Kang Xian (康县), Y. S. Lian (廉永善) 96533, Z. Y. Zhang (张志英) 16965; Lanzhou (兰州), Y. Q. He (何叶琪) 5617, Shaanxi-Gansu Exped. (陕甘队) 10298; Li Xian (礼县), X. L. Chen & Y. F. Wang (陈学林, 王一峰) 910172; Lintan (临潭), Y. S. Lian (廉永善) 96733; Min Xian (岷县), T. P. Wang (王作宾) 4553; Tianshui (天水), K. M. Liu (刘继孟) 10240, 10158, L. Z. Wang (王兰州) 97291; Wen Xian (文县), X. L. Chen & Y. F. Wang (陈学林, 王一峰) 911671, 911298, C. L. Tang (唐昌林) 1674, X. Wang (王新) 422; Wudu (武都), K. S. Hao (郝景盛) 504, Z. Y. Zhang (张志英) 5651; Wushan (武山), Huanghe Exped. (黄河队) 4568; Xiahe (夏河), K. T. Fu (傅坤俊) 868, T. P. Wang (王作宾) 7016; Yuzhong (榆中), Huanghe Exped. (黄河队) 1673, 3219; Zhang Xian (漳县), Huanghe Exped. (黄河队) 4763; Zhouqu (舟曲), Y. S. Lian (廉永善) 93-71, Y. Q. He (何叶琪) 737. **Guizhou** (贵州): Fangjing Shan (梵净山), C. P. Tsien (简焯坡) 30762. **Henan** (河南): Lushi (卢氏), K. M. Liu (刘继孟) 5052, 5150; Song Xian (嵩县), Henan Exped. (河南队) 2557, 2150, Henan Forestry Depart. (河南林业厅) 1239; Xixia (西峡), Henan Exped. (河南队) 1201. **Ningxia** (宁夏): Jingyuan (泾源), Anonymous 0061. **Shaanxi** (陕西): Baoji (宝鸡), Y. S. Lian (廉永善) 96115; Feng Xian (凤县), K. J. Fu (傅坤俊) 17452; Foping (佛坪), P. C. Kuo (郭本兆) 1360, K. J. Fu (傅坤俊) 4539, 5015, T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 3270; Hu Xian (户县), P. C. Kuo (郭本兆) 823, 500; Hua Shan (华山), T. P. Wang (王作宾) 19698, K. S. Hao (郝景盛) 4168; Taibai Shan (太白山), T. Qin (秦田) 22, K. J. Fu (傅坤俊) 4432, F. T. Wang (汪发纘) 19, 25, 130, T. N. Liou & P. C. Tsoong (刘慎谔, 钟补求) 1935, J. X. Yang (杨金祥) 1207, Taibaishan Exped. (太白山队) 58061; Zhouzhi (周至), P. C. Kuo (郭本兆) 1330. **Sichuan** (四川): Baoxing (宝兴), C. H. Chu (曲仲湘) 3421, T. P. Soong (宋滋圃) 38978, 38736, 39240, T. H. Tu (杜大华) 4393, T. T. Yu (俞德浚) 2183; Butuo (布拖), Veg. Exped. Chengdu Biol. Inst. (成都生物所植被组) 13759; Dujiangyan (都江堰), W. P. Fang (方文培) 2230; Emei Shan (峨眉山), Anonymous 56613, T. H. Tu (杜大华) 661, W. P. Fang (方文培) 20687, 20399, J. H. Xiong (熊济华) 31256, 32617, A. M. Lu & Z. R. Wang (路安民, 王中仁) 7905, 7904, 7911, Sino-Russia Exped. (中苏队) 2200, 2257, F. T. Wang (汪发纘) 23409, J. H. Xiong et al. (熊济华等) 10, 31187, G. H. Yang (杨光辉) 56466, X. L. Jiang (蒋兴麋) 31322, K. C. Kuan (关克俭) 4071, C. Y. Wu (吴征镒) 134; Ganluo (甘洛), Sichuan Econ. Pl. Exped. (川经队) 4402; Hanyuan (汉源), Z. S. Liu (刘振书) 594; Heishui (黑水), X. Li (李馨) 73339, 74057, 73895, 73741, 73457, 74000, 73020, 73474, Sino-Russia Exped. (中苏队) 7189, S. Jiang & T. L. Chin (姜恕, 金存礼) 1497, Forest Exped. Three (森调三大队) 188, Sichuan Econ. Pl. Exped. (川经队) 1331; Hongya (洪雅), T. H. Tu (杜大华) 279; Jinchuan (金川), X. Li (李馨) 77317, 77459, 77183, 76295, 77535; Jiulong (九龙), W. L. Chen (陈伟烈) 6380, K. Huang (黄楷) 406; Jiuzhaigou (九寨沟), Q. X. Li & Z. C. Zhao (李全喜, 赵兴存) 3047, 3107, W. H. Li (李文华) 82-402; Kangding (康定), Anonymous 05334, K. C. Kuan et al. (关克俭等) 410, 1481, W. K. Hu (胡文光) 36870; Li Xian (理县), Q. S. Zhao (赵清盛) 46; W. H. Li (李文华) 82-147, Z. L. Wu (吴中伦) 33396, 33512, 33367, S. Jiang & T. L. Chin (姜恕, 金存礼) 936; Luding (泸定), K. C. Kuan (关克俭) 1842; Barkam (马尔康), S. Jiang & T. L. Chin (姜恕, 金存礼) 1213, Z. L. Wu (吴中伦) 1213, X. Li (李馨) 71864, 70946, 71425, Z. Y. Zhang (张泽云) 22998, 23416, Z. Y. Zhang & H. F. Zhou (张泽云, 周洪富) 22909, W. L. Chen et al. (陈伟烈等) 7578; Mao Xian (茂县), Anonymous 11051, F. T. Wang (汪发

纘) 21934; Meigu (美姑), Z. T. Guan (管中天) 6846, 9042, Sichuan Econ. Pl. Exped. (川经队) 1311; Mianning (冕宁), S. K. Wu (武素功) 1754, 1924; Pingwu (平武), X. L. Jiang (蒋兴廖) 10967, 10700; Puge (普格), Sichuan Econ. Pl. Exped. (川经队) 5477, 5497; Songpan (松潘), W. P. Fang (方文培) 4169, X. Li (李馨) 70876, Songpan Exped. (松潘小组) 1675; Tianquan (天全), K. C. Kuan et al. (关克俭等) 1945, W. K. Hu (胡文光) 37815, S. Jiang (姜恕) 9938, S. Jiang & T. L. Chin (姜恕, 金存礼) 1890, X. L. Jiang (蒋兴麟) 37519, 35338; Wenchuan (汶川), F. T. Wang (汪发纘) 21734; Xiaojin (小金), S. S. Chang & Y. X. Ren (张秀实, 任有铎) 6848, 6807, 7071, 6735; Yuexi (越西), Anonymous 4565, Sichuan Econ. Pl. Exped. (川经队) 3852. **Yunnan** (云南): Dagan (大关), NE Yunnan Exped. (滇东北队) 542; Suijiang (绥江), B. S. Sun (孙必兴) 281.

Clematoclethra lasioclada was reduced as a synonym of *C. scandens* ssp. *actinidioides*. Although the shape of leaves varies considerably in *C. scandens*, even from the same specimen, we do not try to further divide *C. scandens* ssp. *actinidioides*.

21. *Saurauia napaulensis* DC., Mém. Ternstroem. 2. 1822. Type: Nepal. Without precise locality, *Wallich Cat.* 14691 (isotype, NY!).

Saurauia napaulensis var. *montana* C. F. Liang & Y. S. Wang in *Fl. Reip. Pop. Sin.* 49 (2): 330. 1984, syn. nov. Type: China. Guangxi (广西): Jingxi (靖西), Z. J. Li (李治基) 1619 (holotype, IBSC; isotype, IBK!).

S. napaulensis var. *omeiensis* C. F. Liang & Y. S. Wang in *Fl. Reip. Pop. Sin.* 49 (2): 330. 1984, syn. nov. Type: China. Sichuan (四川): Emei Shan (峨眉山), G. H. Yang (杨光辉) 55696 (holotype, NAS!).

尼泊尔水东哥

Specimens examined (if not designated, specimens are deposited in PE):

China. Guangxi (广西): Tianlin (田林) Y. K. Li (李荫昆), 502, Z. T. Li (李中提) 600610. **Guizhou** (贵州): Chishui (赤水), P. C. Tsoong (钟补勤) 182, Z. Y. Cao & Z. T. Wang (曹子余, 王忠涛) 64; Xishui (习水), Bijie Exped. (毕节队) 1734. **Sichuan** (四川): Dechang (德昌), Sichuan Veg. Exped. (四川植被调查队) 12403; Ebian (峨边), T. T. Yu (俞德浚) 1677; Emei Shan (峨眉山), Anonymous 234, G. H. Yang (杨光辉) 57004, 55745, 55696, W. P. Fang (方文培) 3238, 16297, 13760, 20894, 18072, F. T. Wang (汪发纘) 23505, T. N. Liou (刘慎谔) 10413, K. Y. Yao (姚开元) 3468, L. N. Zhao (赵良能) 2326; Le Shan (乐山), T. T. Yu (俞德浚) 4366; Leibo (雷波), Sichuan Econ. Pl. Exped. (川经队) 417, T. T. Yu (俞德浚) 4140, Z. T. Guan (管中天) 6406; Pingshan (屏山), T. T. Yu (俞德浚) 4159, 3178, Sichuan Econ. Pl. Exped. (川经队) 1225; Without precise locality, Harry Smith 13612, Y. Tsiang (蒋英) 2115. **Yunnan** (云南): Chuxiong (楚雄), M. K. Li 278, 194, 736; Eshan (峨山), S. K. Wu (武素功) 333; Fengqing (凤庆), T. T. Yu (俞德浚) 16113; Fengyi (凤仪), R. C. Ching (秦仁昌) 25110; Funing (富宁), C. W. Wang (王启无) 89192; Gongshan (贡山), P. I Mao (毛品一) 467; Hekou (河口), W. X. Liu (刘伟心) 346, 448, Y. M. Shui (税玉民) 774, 3471, D. S. Ni (倪达书) s.n.; Jingdong (景东), B. Y. Qiu (邱炳云) 53180, 52569; Jinping (金平), Sino-Russia Exped. (中苏调查队) 3131, 2150, 2816; Jinghong (景洪), C. W. Wang (王启无) 79627, 79535; Lincang (临沧), J. S. Xin (辛景三) 224; Lüchun (绿春), D. D. Tao (陶德定) 95, 953, Lüchun Exped. (绿春队) 366, 561; Lushui (泸水), C. W. Wang (王启无) 14150, Nanshuibeidiao Exped. (南水北调队) 8156; Maguan (马关), H. T. Tsai (蔡希陶) 51882; Malipo (麻栗坡), C. W. Wang (王启无) 87032, K. M. Feng (冯国楣) 13029; Mangshi (芒市), C. Y. Wu (吴征镒) 1153; Menghai (勐海), C. W. Wang (王启无) 74110, 73751; Mongka (蒙卡), H. T. Tsai (蔡希陶) 56437, 56922, 56731; Mengzi (蒙自), C. W. Wang (王启无) 83388, T. N. Liou (刘慎谔) 19044; Ningjiang (宁江), K. M. Feng (冯国楣) 14150; Nujiang Valley (怒江河谷), C. Y. Wu (吴征镒) 958; Pingbian (屏边), H. T. Tsai (蔡希陶) 60106, 52438, 55455, 60746, 62044, 60605, 60002, C. W. Wang (王启无) 81883, K. M. Feng (冯国楣) 4502, P. I Mao (毛品一) 2887, 2605, 3395, 3766; Shuangbai (双柏), W. Q. Yi (尹文清) 857; Simao (思茅), Anonymous 6375, P. I Mao (毛品一) 5728, C. W. Wang (王启无) 81068; Suijiang (绥江), B. S. Sun (孙必兴) 490; Wenshan (文山), K. M. Feng (冯国楣) 11006, H. T. Tsai (蔡希陶) 51545; Xishuangbanna (西双版纳), Sino-Russia Exped. (中苏调查队) 6162, 5684, P. I Mao (毛品一) 7169, 6709; Xichou (西畴), C. P. Tsien (简焯坡) 729, C. W. Wang (王启无) 85280; Yanshan (砚山), C. W. Wang (王启无) 84870; Yiwu (易武), C. W. Wang (王启无) 79950; Yuanyang (元阳), Lüchun Exped. (绿春队) 1639; Zhenkang (镇康), T. T. Yu (俞德浚) 17418, C. W. Wang (王启无) 72122; Without precise locality, T.

T. Yu (俞德浚) 20437, 23080, G. Forrest 8141, 24754, 29789, R. C. Ching (秦仁昌) 50732, 50475.

According to Liang (1984), the three varieties differ in indumentum on the abaxial leaf surface, and the types of hairs and scales on the petioles and branchlets. However, the indumentum on the abaxial leaf surface varies greatly in density when in fruit, which is not necessarily associated with the presence of hairs and scales on petioles and branchlets. Furthermore, unguicular and subulate scales can be present on petioles and branchlets at the same time in one specimen. As a result, var. *montana* and var. *omeiensis* are actually indistinguishable.

22. *Saurauia tristyla* DC., Mém. Ternstroem. 31, t. 4. 1822, Prodr. 1: 526. 1824. Type: India. Without precise locality, Wallich 1466 (isotype, K).

Saurauia tristyla var. *oldhami* Finet & Gagnep., Contr. Fl. As. Or. 2: 14. 1905, syn. nov. Type: China. Taiwan (台湾): Without precise locality, Oldham 34 (holotype, K).

S. tristyla var. *hekouensis* C. F. Liang & Y. S. Wang in Fl. Reip. Pop. Sin. 49 (2): 332. 1984, syn. nov. Type: China. Yunnan (云南): Hekou (河口), W. X. Liu (刘伟心) 95 (holotype, PE!).

水东哥

Specimens examined (if not designated, specimens are deposited in PE):

China. Fujian (福建): Gu Xian (古县), No. 236-6 Exped. (236-6队) 992; Nanjing (南靖), Xiamen Univ. Exped. (厦大采集队) 308, 1061, Y. Ling (林谔) 4570; Yongtai (永泰), Xiamen Univ. Exped. (厦大采集队) 292, Y. Ling (林谔) 292. **Guangdong** (广东): Conghua (从化), L. Deng (邓良) 8709; Dapu (大埔), W. T. Tsang (曾怀德) 21298; Deqing (德庆), Y. G. Liu (刘英光) 1127; Enping (恩平), M. X. Huang (黄茂先) 110433; Gaoyao (高要), C. Huang (黄成) 162458; Gaozhou (高州), P. C. Zhou (周沛春) 10099, 10456, Y. Tsiang (蒋英) 2146; Heyuan (河源), C. F. Wei (卫兆芬) 120497; Huiyang (惠阳), C. F. Wei (卫兆芬) 121532; Huaiji (怀集), Y. G. Liu (刘英光) 2668; Kaiping (开平), M. X. Huang (黄茂先) 110617; Lechang (乐昌), N. Q. Chen (陈念劬) 42210; Lianshan (连山), P. C. Tam (谭沛祥) 58823; Luofu Shan (罗浮山), N. Q. Chen (陈念劬) 41226; Raofeng (饶丰), X. G. Li (李学根) 200887; Wengyuan (翁源), X. G. Li (李学根) 24483; Wuhua (五华), X. G. Li (李学根) 201618; Xinxing (新兴), Y. G. Liu (刘英光) 2035; Yunfu (云浮), Y. Tsiang (蒋英) 1831; Zengcheng (增城), C. F. Wei (卫兆芬) 122066; Without precise locality, L. Deng (邓良) 5407, Y. Tsiang (蒋英) 1768, X. Y. Hu (胡秀英) 10480, 9594. **Guangxi** (广西): Baise (百色), Baise Exped. (百色队) 1143; Bama (巴马), Y. K. Li (李荫昆) p01049; Cangwu (苍梧), S. H. Chun (陈少卿) 9939; Fusui (扶绥), S. H. Chun (陈少卿) 12110; Gaofeng (高峰), Guangxi Exped. (广西队) 322; Guigang (贵港), Z. Z. Chen (陈照宙) 50691; Jinxiu (金秀), Anonymous 8120; Longzhou (龙州), X. R. Liang (梁向日) 65980, Y. K. Li (李荫昆) 306, S. P. Ko (高锡朋) 55108; Nanning (南宁), Guangxi Exped. (广西队) 2768; Ping Xiang (凭祥), Z. R. Huang (黄增任) 3611; Shangsi (上思), Beijing Youth Exped. (北京青年队) 774; Yangshuo (阳朔), R. H. Shan (单人骅) 1034; Wuming (武鸣), X. R. Liang (梁向日) 67112; Wuzhou (梧州), S. Q. Zhong (钟树权) A62612; Without precise locality, Anonymous 70085, 41256, 68513, 65980, S. P. Ko (高锡朋) 55598. **Guizhou** (贵州): Chishui (赤水), Z. Y. Chao (曹子余) 40. **Hainan** (海南): Baoting (保亭), F. C. How (侯宽昭) 72212, Diaoluoshan Exped. (吊罗山队) 2610, 2736, 2502; Chengmai (澄迈), C. I. Lei 145; Danzhou (儋州), W. T. Tsang (曾怀德) 266, Tsang & Fung 252, Hainan Exped. (海南队) 308; Ding'an (定安), Z. Wang (黄志) 35427, X. R. Liang (梁向日) 64571, 64324; Jianfengling (尖峰岭), K. S. Chow 78456, 78358, 78991; Ledong (乐东), X. Q. Liu (刘心祈) 27391; Lingao (临高), T. W. Tsang (曾怀德) 170; Lingshui (陵水), F. A. McClure 20092; Qionghai (琼海), Hainan Exped. (海南队) 202; Qiongzong (琼中), Hainan Exped. (海南队) 814; S. H. Chun (陈少卿) 10585, L. Deng (邓良) 3426; Sanya (三亚), X. Q. Liu (刘心祈) 167, F. C. How (侯宽昭) 70725, X. R. Liang (梁向日) 62718; Tongjia (铜甲), N. Q. Chen (陈念劬) 43403; Wuzhi Shan (五指山), Tsang & Fung 252; Without precise locality, Hainan Exped. (海南队) 970, 769. **Sichuan** (四川): Le Shan (乐山), W. P. Fang (方文培) 12419, Z. T. Guan (管中天) 6122; Yibin (宜宾), H. Smith 10010. **Taiwan** (台湾): Taibei (台北), C. M. Wang 2813; Taoyuan (桃园), B. Bartholomew 7908; Without precise locality, C. H. Tsou 500, T. Tanaka & Y. Shimada s.n., R. F. Thorne 62739, 62878. **Yunnan** (云南): Cangyuan (沧源), C. W. Wang (王启无) 73295; Funing (富宁), C. W. Wang (王启无) 88953, 88609, 89187; Hekou (河口), Anonymous 535, F. J. Gao (高福京) s.n., K. H. Cai (蔡克华) 26, 512, 997, 186, 754,

296, Sino-Russia Exped. (中苏队) 2363, 21799, 3414, 3198, W. X. Liu (刘伟心) 717, Y. M. Shui (税玉民) 3525, Hekou Exped. (河口队) 110; Jinping (金平), J. X. Zhang (张建勋) 248, 251, 246, Sino-Russia Exped. (中苏队) 315, 126, 720, 2494, 3140, Lüchun Exped. (绿春队) 1077, 265, 267, 657; Jinghong (景洪), C. W. Wang (王启无) 77425, 77423; Lüchun (绿春), D. D. Tao (陶德定) 657; Maguan (马关), Sino-Russia Exped. (中苏队) 3287; Menghai (勐海), C. W. Wang (王启无) 73827, 74659, 73295; Malipo (麻栗坡), C. W. Wang (王启无) 86487; Mengzi (蒙自), T. N. Liou (刘慎谔) 18682; Pingbian (屏边), H. T. Tsai (蔡希陶) 61163, 60721, P. I. Mao (毛品一) 4078, Sino-Russia Exped. (中苏队) 4006, C. W. Wang (王启无) 60870; Xichou (西畴), C. W. Wang (王启无) 85605; Xishuangbanna (西双版纳), Yunnan No. 1 Exped. (云南1组) 215; Yanshan (砚山), C. W. Wang (王启无) 84928; Yuanyan (元阳), Lüchun Exped. (绿春队) 1516; Without precise locality, Zijiao Exped. (紫胶队) 1748.

This species shows considerable variation in leaf shape and in the shape of scales on petioles and branchlets, but especially in the hirsute hairs along the midvein and lateral veins. In between lateral veins the hairs can be from nonexistent to very sparse to dense. Such variability does not justify recognition of varietal entities. Thus, *S. tristyla* var. *oldhami* and *S. tristyla* var. *hekouensis* are treated as synonyms in the present treatment.

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摘要 作者在编写《Flora of China》猕猴桃科Actinidiaceae时，对一些分类群的处理做了变动，提出了一些异名，本文对异名进行了必要的解释。
关键词 猕猴桃科; 植物志; 中国; 新异名